



PENNBARRY™

Moving Your Way

ROUND CENTREX

Centrifugal Inline Fans

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BULLETIN REX15

INTRODUCTION

Centrex REX Centrifugal Inline Fans

REX Inline fans are widely used in round ducts as clean air boosters in both supply and exhaust systems where the installation of conventional blowers is impractical. Their compact design gives designers an excellent alternative to conventional blowers.

As an integral part of a ventilation system layout, REX Inline fans can be installed either horizontally, vertically or at any angle determined by the duct work. Removable gasket sealed panels enable easy access to the fan interior. Direct-drive motors are isolated from the airstream. Belt drive motors are mounted on the outside housing and can be positioned at any angle to avoid existing building obstructions. Optional motor covers are available as belt guards.

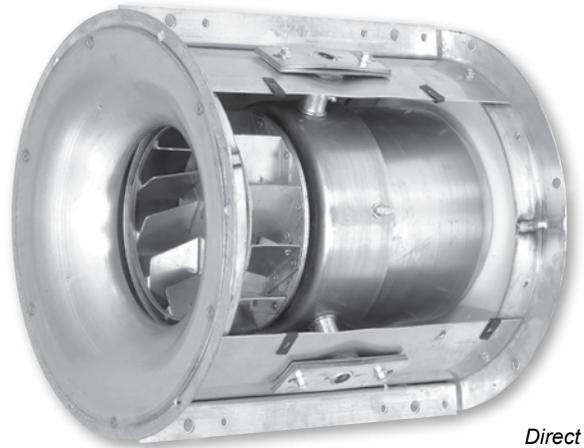
REX Inline fans feature durable galvanized steel construction, which works in conjunction with a patented wheel design and deeply spun inlets to provide smoother flow through the ventilator. The centrifugal wheels are aluminum, non-overloading, backwardly inclined, robotically welded, and dynamically balanced.

Direct Drive Units

- Static pressure up to 1.5" wg.
- Flow capacity up to 2,290 CFM

Belt Drive Units

- Static pressure up to 3.0" wg.
- Flow capacity up to 22,054 CFM



*Direct Drive
Centrex REX*



*Belt Drive
Centrex REX*

CERTIFICATIONS & LISTINGS



Centrex REX Centrifugal Inline Fans

PennBarry certifies that the Centrex REX models shown herein are 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.



UL and cUL Certification

Centrex REX fans carry the UL label, UL705, (ZACT/ZACT7), file #E28413.

FEATURES & BENEFITS

Direct Drive Application

The direct drive Centrex is available in sizes from 8 through 12 to deliver from 75 CFM to 2290 CFM. Nationally known motors are available in all speeds as well as optional multi-speed, totally enclosed motors. The direct drive Centrex features motor compartment cooling to prolong motor life. Vanes on the motor housing serve as a heat sink and assist in dissipating any heat build-up. The entire operating assembly is floated on tubular supports. Efficient aluminum, backward inclined wheels and aerodynamic straightening vanes (size REX10 and larger) give the Centrex a quiet efficiency unmatched by competitive models.

Belt Drive Application

Sizes from 12 through 36 are available in the belt drive Centrex. Belt drive models provide an almost infinite variation of capacity across the entire range of operation. Motors and drive pulleys are mounted on the Centrex exterior so they are readily accessible. Adjustable pitch pulleys are standard, for speed and capacity adjustment on the spot. Aerodynamic straightening vanes provide extra high efficiency operation in the larger sizes.

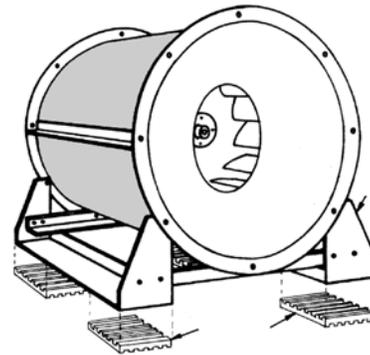
An extra deep spun inlet venturi mates with a spun bottom wheel inlet plate. This smooth inlet condition assures high capacity even at higher static pressures. The Centrex inlet was actually patterned after the calibrated nozzles specified by AMCA for air movement testing. All of these design features, coupled with low outlet velocities, mean low operating noise levels with smooth, efficient airflow.

Aluminium Wheels

The “heart” of the Centrex exhauster is its aluminum wheel. The wheel construction is spark-proof and non-corroding, and produces reduced motor starting torque and long bearing life. In sizes, REX08, REX10 and REX12, specially designed high volume wheels are provided. All testing and rating is done in an AMCA approved laboratory.

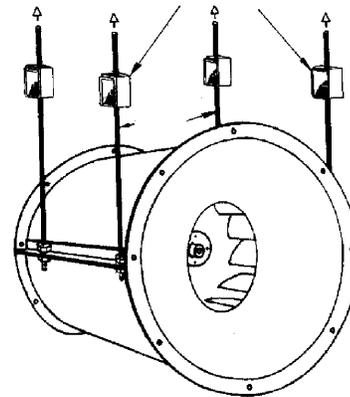
Support Legs

Securely bolted to casing rings providing stable method for supporting blower unit from the ceiling, floor, or wall. Legs are to be fastened to the fan casing in the field.



Support Angles

Fastened to the casing and designed for horizontal blower suspension from rod hangers. Vibration hangers are recommended.



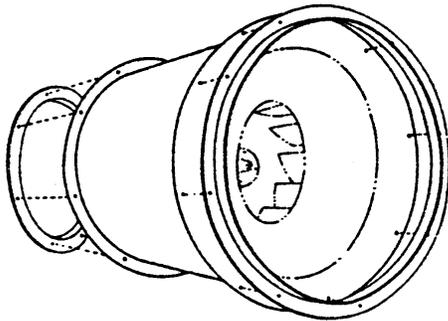
OPTIONS & ACCESSORIES

Variable Inlet Vanes

Variable inlet vanes are available to provide the efficient regulation of fan output over all operating ranges. These vanes provide substantial increases in energy efficiency during times when full fan output is not necessary. Both manual and automatic operation are available.

Companion Angle Rims

An extra pair of companion angle rings are available for use on duct work when the Centrex is connected to a duct by a transition section. The angle rings fit the fan to the transitions and guarantee proper sizing.

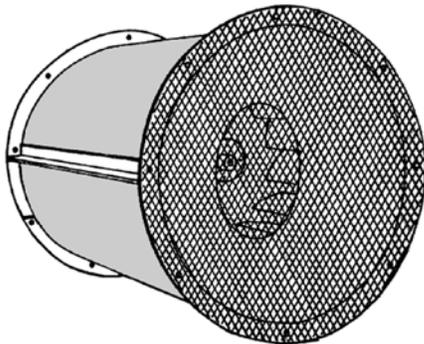


Safety Disconnect Switches

Safety disconnect switches are available to allow positive electrical shut-off and safety. Wiring is only run from the motor to the junction box. (Factory wiring for explosion proof applications is not available.) A wide range of NEMA rated enclosures with disconnect switches are available for indoor, outdoor, and explosion proof installations. Disconnects are to be field wired by a licensed electrician.

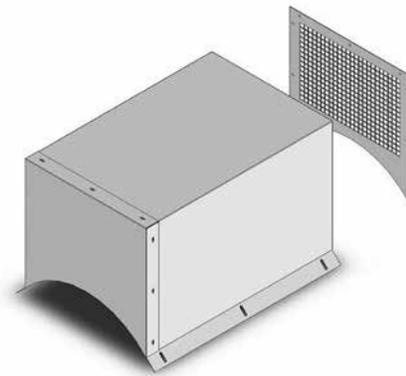
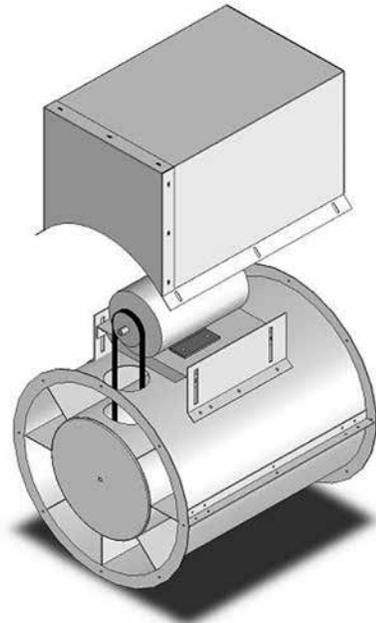
Fan Guards

Inlet guards or discharge guards are available when required. Such safety guards are made of expanded metal attached to the fan casing. Front and rear guards are recommended whenever the fan is mounted within 7 feet of an occupied space (OSHA requirements) and otherwise unprotected (by duct work, for example).



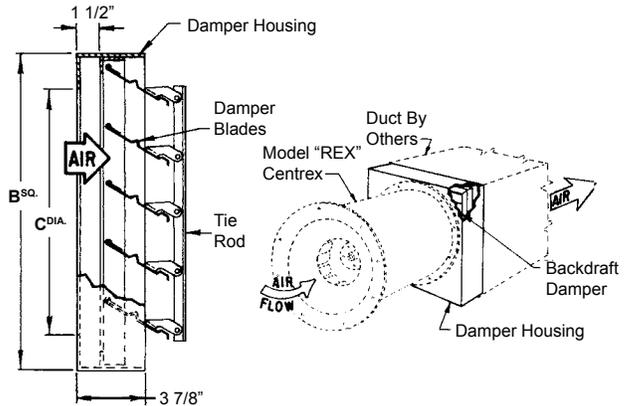
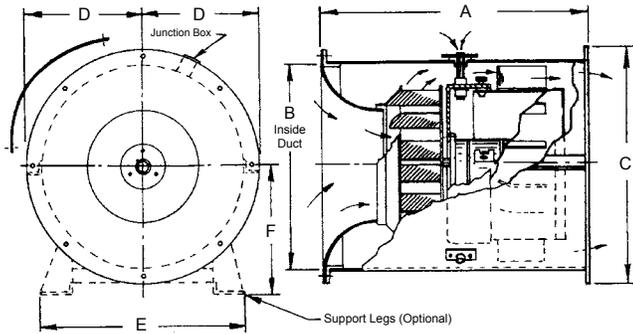
Weather Covers

Illustrated below is the complete motor and drive cover for belt-driven units. These are optional accessories and are available to provide safe operating conditions where dictated. This motor and drive cover can serve as an OSHA belt guard.



Note: Various other optional items are available when required. Where the support legs are used, heavy duty neoprene vibration flex pads are available in 6" x 6" size. Where the angle support feature is used for ceiling suspension, hanger-type vibration eliminators featuring rubber-in-shear mounts are available. Canvas connectors, duct transition, anchors and hanger rods are normally furnished by others.

REX08, REX10 & REX12 | DIRECT DRIVE



Model	RPM	Tip Speed FPM	Outlet Area (Sq. Ft.)	HP	Max BHP	Fan Capacity - Cubic Feet Per Minute (CFM)												
						0.000" S.P.	0.125" S.P.	0.250" S.P.	0.375" S.P.	0.500" S.P.	0.625" S.P.	0.750" S.P.	0.875" S.P.	1.000" S.P.	1.125" S.P.	1.250" S.P.	1.375" S.P.	1.500" S.P.
REX08V	1050	2270	0.902	1/25	0.01	320	170	-	-	-	-	-	-	-	-	-	-	-
REX08T	1140	2470		1/12	0.02	345	210	75	-	-	-	-	-	-	-	-	-	-
REX08R	1550	3350		1/25	0.04	470	380	270	185	-	-	-	-	-	-	-	-	-
REX08Q	1750	3780		1/12	0.06	530	455	350	265	195	-	-	-	-	-	-	-	-
REX10V	1050	3020	1.15	1/12	0.04	645	545	435	310	-	-	-	-	-	-	-	-	-
REX10T	1140	3280		1/12	0.05	700	625	520	415	-	-	-	-	-	-	-	-	-
REX10Q	1750	5050		1/4	0.18	1070	1000	950	900	845	775	695	635	550	235	-	-	-
REX12V	1050	3710	1.97	1/6	0.14	1375	1170	955	670	415	-	-	-	-	-	-	-	-
REX12T	1140	4030		1/4	0.18	1495	1300	1125	850	620	365	-	-	-	-	-	-	-
REX12Q	1750	6185		3/4	0.64	2290	2140	2030	1925	1810	1685	1500	1320	1165	1015	865	705	515

Direct	Belt	B ^{sq.}	C ^{dial.}
REX08	-	16 1/4	12 7/8
REX10	-	20	14 1/2
REX12	REX12B	22 1/2	19
-	REX14B	28	23
-	REX20B	30 3/4	27 3/4
-	REX22B	35 3/4	33 1/4
-	REX27B	43 3/4	40 1/2
-	REX33B	54 3/4	49 1/2

Model	A	B	C	D	E	F	Ship Wt.
REX08	16 1/2	12 7/8	15 5/8	7 13/16	13 1/2	9 1/4	25
REX10	21	14 1/2	17 1/4	8 5/8	21 1/4	11 3/8	35
REX12	22	19	21 3/8	10 11/16	23 1/2	13 3/8	50

All dimensions are in inches.

All direct driven Centrex units are pre-wired at the factory.

Lek-Trol™ Controller Options

PennBarry's solid state Lek-Trol™ lets you "tune-in" to the precise air volume needed. Adjust fan speed with a turn of the dial. Attractive, variable speed switch provides ON-OFF control and permits air movement adjustment from 100% of capacity to 50%. Lek-Trols are available for use with direct drive Centrex units.

Model LT30 (2.5 Amps) (115/1/50-60)	Model LT40 (10 Amps) (115/1/50-60)	Model LT50 (6 Amps) (115/1/50-60)	Model LT35 (5 Amps) (230/1/50-60)
REX08V, REX08R, REX08Q, REX10V, REX10T	REX10Q, REX12Q	REX12T	REX12Q

Performance shown is for installation type A - Free inlet, Free outlet. Performance ratings do not include the effects of appurtenances in the airstream. S.P. figures are external pressures (0.000" S.P. includes all internal fan losses). The AMCA Certified Ratings Seal applies to air capacities only. Variable speeds for direct drive models can be obtained by using the Lek-Trol™ solid state speed controller for single phase.

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CENTREX REX | BELT DRIVE

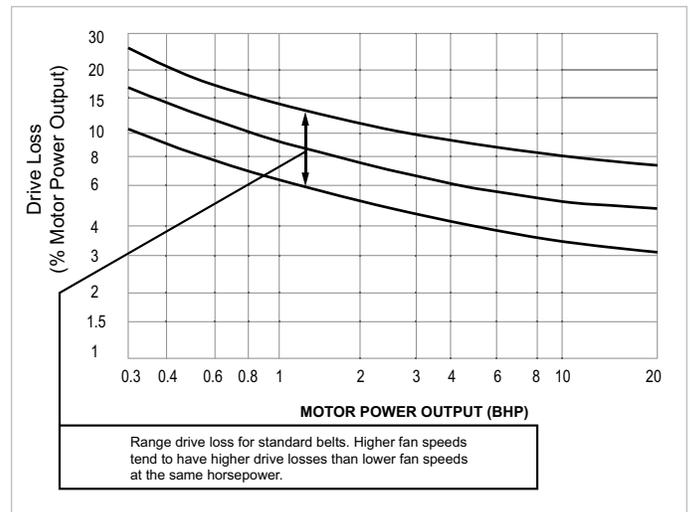
Estimated Belt Drive Losses

The AMCA 203 Review Committee has developed the chart shown here for the purpose of estimating belt drive losses. To calculate total BHP (including drive losses): Find the BHP of your operating point on the X-Axis of the chart. Follow the vertical line to the lines indicating the range of drive losses. Look at the Y-Axis on the left and find the drive loss percentage. Calculate the total BHP by adding the drive loss percentage to the operating point BHP. For BHP's below .3, use 30%.



Belt Drive
Centrex REX

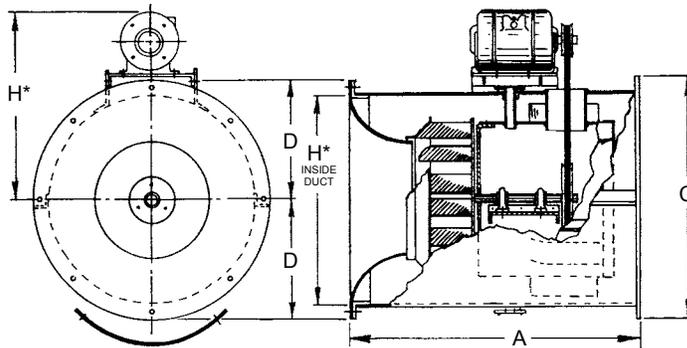
Drive Loss Reference Chart



For totally enclosed, explosion proof, multi-speed and all 1.0 Service Factor motors, fan BHP plus drive losses should not exceed motor rated HP.

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REX12B | BELT DRIVE



Model	A	B	C	D	E	F	H*	Approximate Ship Weight (LBS.)
REX12B	23	19	21 3/8	10 11/16	23 1/2	13 3/8	23 11/16	72

*Maximum for open motors and highest HP available for that size. All dimensions in inches.

Wheel Size	Inlet and Outlet	Tip Speed
Diameter = 13.50" Circumference = 3.53"	Inside Diameter = 19" Fan Outlet Area = 1.97 sq. ft.	3.53 x RPM

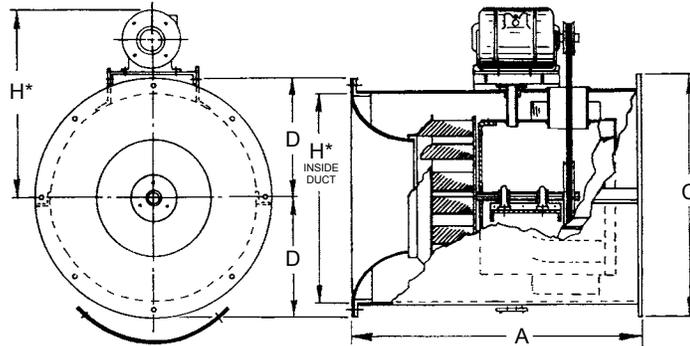
RPM	Fan Capacity - Cubic Feet Per Minute (CFM)																	
	0.000" S.P.		0.125" S.P.		0.250" S.P.		0.375" S.P.		0.500" S.P.		0.625" S.P.		0.750" S.P.		0.875" S.P.		1.000" S.P.	
	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP
800	1035	0.07	810	0.07	500	0.06	-	-	-	-	-	-	-	-	-	-	-	-
1020	1320	0.14	1155	0.14	955	0.14	710	0.13	350	0.09	-	-	-	-	-	-	-	-
1040	1345	0.15	1185	0.15	990	0.14	755	0.13	425	0.10	-	-	-	-	-	-	-	-
1300	1680	0.30	1560	0.29	1415	0.29	1255	0.28	1085	0.27	880	0.25	625	0.21	200	0.14	-	-
1320	1705	0.31	1585	0.31	1450	0.30	1290	0.29	1125	0.29	925	0.27	685	0.23	315	0.16	-	-
1370	1770	0.35	1653	0.34	1525	0.34	1375	0.33	1215	0.32	1040	0.31	825	0.28	540	0.23	-	-
1420	1835	0.38	1720	0.38	1600	0.38	1454	0.37	1310	0.36	1150	0.35	950	0.33	725	0.29	385	0.21
1530	1980	0.48	1875	0.48	1760	0.48	1635	0.47	1500	0.46	1355	0.45	1205	0.44	1020	0.41	810	0.37
1600	2070	0.55	1970	0.55	1865	0.54	1745	0.54	1615	0.53	1485	0.52	1345	0.51	1175	0.49	995	0.45
1670	2160	0.63	2065	0.62	1965	0.62	1855	0.62	1730	0.61	1605	0.59	1475	0.59	1340	0.57	1170	0.55
1900	2455	0.92	2385	0.92	2285	0.92	2195	0.91	2100	0.91	1985	0.90	1880	0.88	1770	0.87	1650	0.86
1960	2535	1.01	2465	1.01	2370	1.00	2285	1.00	2190	1.00	2085	0.99	1980	0.97	1875	0.96	1760	0.95

RPM	Fan Capacity - Cubic Feet Per Minute (CFM)																	
	1.125" S.P.		1.250" S.P.		1.375" S.P.		1.500" S.P.		1.625" S.P.		1.750" S.P.		1.875" S.P.		2.000" S.P.		2.125" S.P.	
	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP
1530	520	0.29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1600	790	0.40	485	0.32	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1670	995	0.51	775	0.42	470	0.35	-	-	-	-	-	-	-	-	-	-	-	-
1900	1530	0.84	1380	0.81	1230	0.78	1075	0.73	870	0.65	615	0.55	280	0.42	-	-	-	-
1960	1650	0.93	1520	0.92	1375	0.88	1220	0.84	1060	0.78	860	0.69	600	0.59	275	0.46	-	-

Performance shown is for installation type A - Free inlet, Free outlet. Power rating (BHP) does not include drive losses. Performance ratings do not include the effects of appurtenances in the airstream. The AMCA Certified Ratings Seal applies to air capacities only.

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REX14B | BELT DRIVE



Model	A	B	C	D	E	F	H*	Approximate Ship Weight (LBS.)
REX14B	25	23	25 3/8	12 11/16	25 1/2	15 1/8	25 1/2	98

*Maximum for open motors and highest HP available for that size. All dimensions in inches.

Wheel Size	Inlet and Outlet	Tip Speed
Diameter = 16.50" Circumference = 3.53"	Inside Diameter = 23" Fan Outlet Area = 2.88 sq. ft.	4.30 x RPM

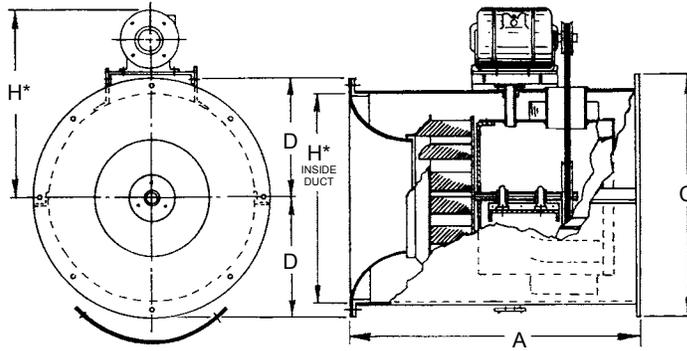
RPM	Fan Capacity - Cubic Feet Per Minute (CFM)																	
	0.125" S.P.		0.250" S.P.		0.375" S.P.		0.500" S.P.		0.625" S.P.		0.750" S.P.		0.875" S.P.		1.000" S.P.		1.125" S.P.	
	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP
925	1815	0.25	1505	0.22	1105	0.19	825	0.17	520	0.16	-	-	-	-	-	-	-	-
1000	2000	0.32	1740	0.29	1370	0.25	1050	0.22	820	0.21	510	0.20	-	-	-	-	-	-
1075	2185	0.40	1950	0.37	1655	0.34	1300	0.30	1040	0.27	825	0.26	535	0.25	-	-	-	-
1150	2370	0.50	2155	0.47	1900	0.43	1565	0.39	1275	0.35	1065	0.33	845	0.32	560	0.31	-	-
1225	2550	0.60	2355	0.57	2130	0.54	1850	0.49	1530	0.45	1285	0.41	1095	0.39	890	0.38	620	0.38
1300	2730	0.73	2545	0.69	2345	0.66	2105	0.62	1800	0.57	1535	0.52	1315	0.48	1140	0.47	945	0.46
1375	2910	0.86	2735	0.83	2550	0.79	2345	0.75	2085	0.70	1795	0.64	1560	0.60	1360	0.57	1200	0.55
1450	3085	1.02	2920	0.98	2750	0.94	2565	0.90	2345	0.85	2075	0.80	1810	0.74	1600	0.70	1420	0.66
1525	3260	1.19	3105	1.15	2945	1.11	2775	1.06	2580	1.02	2355	0.96	2085	0.90	1855	0.85	1655	0.81
1600	3435	1.38	3285	1.33	3135	1.29	2980	1.25	2805	1.20	2605	1.15	2370	1.09	2110	1.02	1910	0.98
1660	3575	1.54	3430	1.50	3285	1.45	3140	1.41	2975	1.36	2795	1.31	2590	1.23	2345	1.19	2110	1.12
1750	3780	1.81	3650	1.76	3510	1.72	3370	1.67	3225	1.62	3070	1.57	2885	1.52	2680	1.45	2445	1.38

RPM	Fan Capacity - Cubic Feet Per Minute (CFM)																	
	1.250" S.P.		1.375" S.P.		1.500" S.P.		1.625" S.P.		1.750" S.P.		1.875" S.P.		2.000" S.P.		2.250" S.P.		2.500" S.P.	
	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP
1300	690	0.45	355	0.42	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1375	1015	0.54	785	0.54	485	0.51	-	-	-	-	-	-	-	-	-	-	-	-
1450	1265	0.65	1095	0.64	880	0.63	625	0.61	-	-	-	-	-	-	-	-	-	-
1525	1485	0.77	1340	0.75	1180	0.74	985	0.73	765	0.72	460	0.68	-	-	-	-	-	-
1600	1720	0.93	1560	0.89	1420	0.87	1275	0.86	1095	0.85	895	0.84	645	0.81	-	-	-	-
1660	1915	1.07	1745	1.02	1605	0.99	1465	0.97	1320	0.96	1150	0.95	955	0.94	420	0.86	-	-
1750	2225	1.31	2040	1.26	1875	1.20	1725	1.17	1605	1.15	1465	1.13	1325	1.12	965	1.01	445	1.00

Performance shown is for installation type A - Free inlet, Free outlet. Power rating (BHP) does not include drive losses. Performance ratings do not include the effects of appurtenances in the airstream. The AMCA Certified Ratings Seal applies to air capacities only.

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REX20B | BELT DRIVE



Model	A	B	C	D	E	F	H*	Approximate Ship Weight (LBS.)
REX20B	30	27 3/4	30 1/8	15 1/16	16 5/8	34	29	167

*Maximum for open motors and highest HP available for that size. All dimensions in inches.

Wheel Size	Inlet and Outlet	Tip Speed
Diameter = 20" Circumference = 5.23"	Inside Diameter = 27.75" Fan Outlet Area = 4.20 sq. ft.	5.23 x RPM

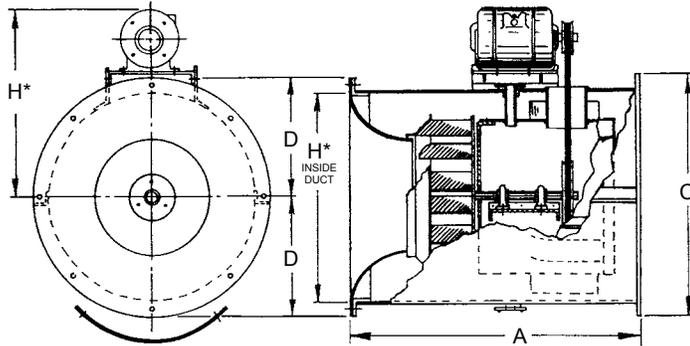
RPM	Fan Capacity - Cubic Feet Per Minute (CFM)																		
	0.125" S.P.		0.250" S.P.		0.375" S.P.		0.500" S.P.		0.625" S.P.		0.750" S.P.		0.875" S.P.		1.000" S.P.		1.125" S.P.		
	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	
705	2563	0.26	2275	0.27	1775	0.25	1330	0.24	-	-	-	-	-	-	-	-	-	-	-
770	2850	0.34	2586	0.35	2226	0.34	1739	0.32	1304	0.29	-	-	-	-	-	-	-	-	-
875	3306	0.50	3069	0.51	2851	0.51	2504	0.50	2038	0.47	1723	0.45	-	-	-	-	-	-	-
945	3606	0.63	3391	0.65	3176	0.65	2909	0.64	2568	0.62	2142	0.59	1851	0.57	777	0.32	-	-	-
1000	3840	0.75	3639	0.76	3429	0.80	3235	0.76	2910	0.75	2531	0.73	2190	0.70	1904	0.68	-	-	-
1050	4052	0.86	3859	0.88	3659	0.89	3491	0.88	3213	0.87	2921	0.86	2515	0.83	2224	0.80	1918	0.78	-
1110	4305	1.02	4123	1.04	3935	1.05	3754	1.06	3571	1.05	3277	1.03	2977	1.01	2602	0.97	2336	0.95	-
1185	4619	1.20	4449	1.26	4278	1.27	4100	1.28	3937	1.28	3724	1.26	3454	1.25	3171	1.23	2812	1.18	-
1270	4974	1.52	4815	1.54	4656	1.56	4490	1.57	4331	1.57	4200	1.57	3964	1.55	3712	1.54	3462	1.52	-
1385	5452	1.97	5307	1.99	5161	2.01	5015	2.03	4859	2.04	4716	2.00	4600	2.00	4400	2.02	4169	2.00	-
1480	5845	2.40	5709	2.43	5573	2.45	5436	2.46	5298	2.53	5152	2.49	5020	2.50	4914	2.50	4729	2.47	-
1580	6258	2.92	6131	2.95	6003	2.97	5875	2.99	5748	3.01	5615	3.03	5479	3.03	5356	3.03	5237	3.03	-

RPM	Fan Capacity - Cubic Feet Per Minute (CFM)																		
	1.250" S.P.		1.375" S.P.		1.500" S.P.		1.750" S.P.		1.875" S.P.		2.000" S.P.		2.250" S.P.		2.500" S.P.		2.750" S.P.		
	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	
1110	2046	0.92	945	0.53	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1185	2554	1.16	2322	1.13	1584	0.88	-	-	-	-	-	-	-	-	-	-	-	-	-
1270	3117	1.48	2838	1.44	2626	1.41	1395	0.93	-	-	-	-	-	-	-	-	-	-	-
1385	3967	1.98	3683	1.96	3368	1.91	2915	1.84	2726	1.80	2417	1.74	-	-	-	-	-	-	-
1480	4515	2.45	4296	2.43	4096	2.41	3523	2.31	3296	2.27	3114	2.25	2680	2.17	-	-	-	-	-
1580	5099	3.01	4910	2.99	4698	2.97	4330	2.92	4000	2.87	3752	2.81	3366	2.74	3003	2.68	1500	1.63	-

Performance shown is for installation type A - Free inlet, Free outlet. Power rating (BHP) does not include drive losses. Performance ratings do not include the effects of appurtenances in the airstream. The AMCA Certified Ratings Seal applies to air capacities only.

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REX22B | BELT DRIVE



Model	A	B	C	D	E	F	H*	Approximate Ship Weight (LBS.)
REX22B	32	33 1/4	35 5/8	17 13/16	37 3/4	18 5/8	33	175

*Maximum for open motors and highest HP available for that size. All dimensions in inches.

Wheel Size	Inlet and Outlet	Tip Speed
Diameter = 24.50" Circumference = 6.41"	Inside Diameter = 33.25" Fan Outlet Area = 6.03 sq. ft.	6.41 x RPM

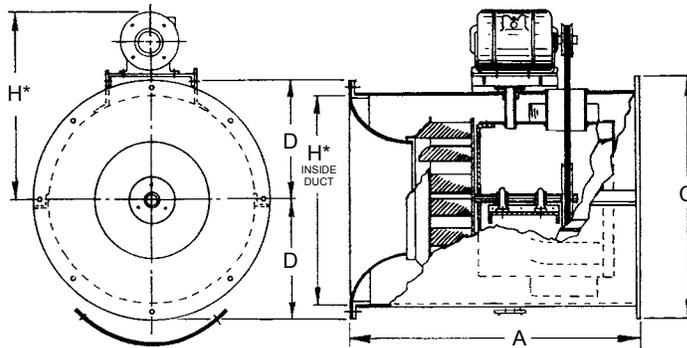
RPM	Fan Capacity - Cubic Feet Per Minute (CFM)																	
	0.125" S.P.		0.250" S.P.		0.375" S.P.		0.500" S.P.		0.625" S.P.		0.750" S.P.		0.875" S.P.		1.000" S.P.		1.125" S.P.	
	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP
590	3372	0.38	2910	0.38	2313	0.36	1498	0.31	-	-	-	-	-	-	-	-	-	-
655	3821	0.52	3437	0.52	2968	0.51	2367	0.49	1592	0.41	-	-	-	-	-	-	-	-
745	4430	0.75	4116	0.76	3757	0.76	3322	0.75	2801	0.72	2158	0.66	-	-	-	-	-	-
765	4564	0.82	4264	0.83	3922	0.83	3505	0.82	3021	0.79	2437	0.74	1685	0.62	-	-	-	-
835	5031	1.06	4774	1.07	4461	1.08	4121	1.07	3735	1.06	3278	1.03	2742	0.98	2128	0.88	-	-
900	5461	1.32	5224	1.34	4949	1.35	4658	1.35	4316	1.34	3945	1.32	3521	1.29	3023	1.23	2465	1.14
965	5888	1.63	5667	1.65	5428	1.66	5157	1.66	4877	1.66	4544	1.65	4189	1.63	3794	1.59	3336	1.53
1010	6183	1.86	5972	1.88	5755	1.90	5496	1.90	5237	1.90	4938	1.89	4620	1.88	4259	1.85	3882	1.82
1060	6510	2.15	6308	2.17	6107	2.19	5868	2.20	5622	2.20	5367	2.20	5064	2.18	4760	2.17	4403	2.13
1130	6965	2.60	6777	2.63	6588	2.65	6382	2.66	6151	2.66	5920	2.67	5670	2.66	5385	2.65	5101	2.63
1210	7484	3.19	7308	3.22	7132	3.24	6955	3.27	6745	3.27	6529	3.27	6313	3.27	6079	3.27	5813	3.25
1300	8066	3.96	7902	3.98	7738	4.01	7574	4.03	7402	4.05	7201	4.06	6999	4.06	6798	4.06	6589	4.06

RPM	Fan Capacity - Cubic Feet Per Minute (CFM)																	
	1.250" S.P.		1.375" S.P.		1.500" S.P.		1.750" S.P.		1.875" S.P.		2.000" S.P.		2.250" S.P.		2.500" S.P.		2.750" S.P.	
	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP
900	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
965	2832	1.44	2232	1.28	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1010	3427	1.75	2940	1.65	2373	1.48	-	-	-	-	-	-	-	-	-	-	-	-
1060	4039	2.10	3603	2.02	3143	1.92	-	-	-	-	-	-	-	-	-	-	-	-
1130	4770	2.59	4433	2.56	4045	2.49	3182	2.27	2668	2.08	-	-	-	-	-	-	-	-
1210	5547	3.23	5255	3.20	4940	3.16	4240	3.03	3858	2.94	3430	2.80	-	-	-	-	-	-
1300	6341	4.04	6094	4.02	5846	4.00	5264	3.92	4968	3.87	4612	3.78	3875	3.55	2986	3.12	-	-

Performance shown is for installation type A - Free inlet, Free outlet. Power rating (BHP) does not include drive losses. Performance ratings do not include the effects of appurtenances in the airstream. The AMCA Certified Ratings Seal applies to air capacities only.

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REX27B | BELT DRIVE



Model	A	B	C	D	E	F	H*	Approximate Ship Weight (LBS.)
REX27B	36	40 1/2	43 1/4	21 5/8	46 3/4	24	41	325

*Maximum for open motors and highest HP available for that size. All dimensions in inches.

Wheel Size	Inlet and Outlet	Tip Speed
Diameter = 30.50" Circumference = 7.98"	Inside Diameter = 40.50" Fan Outlet Area = 8.94 sq. ft.	7.98 x RPM

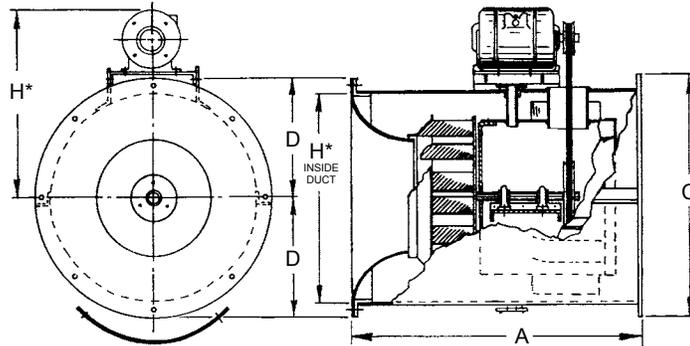
RPM	Fan Capacity - Cubic Feet Per Minute (CFM)																	
	0.125" S.P.		0.250" S.P.		0.375" S.P.		0.500" S.P.		0.625" S.P.		0.750" S.P.		0.875" S.P.		1.000" S.P.		1.125" S.P.	
	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP
445	5760	0.55	5080	0.57	4185	0.55	2430	0.42	-	-	-	-	-	-	-	-	-	-
505	6685	0.79	6170	0.83	5460	0.84	4595	0.79	3090	0.65	-	-	-	-	-	-	-	-
550	7375	1.01	6915	1.05	6315	1.08	5675	1.07	4715	0.99	3230	0.82	-	-	-	-	-	-
630	8570	1.51	8160	1.55	7755	1.60	7195	1.63	6660	1.61	5935	1.56	4910	1.42	3470	1.18	-	-
690	9455	1.97	9085	2.01	8710	2.07	8310	2.12	7775	2.14	7295	2.12	6640	2.05	5790	1.94	4705	1.75
790	10915	2.92	10610	3.00	10275	3.04	9975	3.12	9615	3.17	9155	3.20	8700	3.22	8280	3.17	7715	3.10
865	12005	3.82	11735	3.91	11430	3.96	11130	4.02	10860	4.11	10525	4.17	10105	4.19	9690	4.22	9270	4.25
940	13090	4.87	12845	4.99	12580	5.07	12295	5.11	12020	5.18	11775	5.28	11465	5.34	11115	5.39	10700	5.40
1005	14025	5.94	13800	6.06	13560	6.16	13295	6.21	13035	6.28	12780	6.35	12550	6.46	12260	6.53	11935	6.58
1075	15030	7.25	14820	7.38	14600	7.50	14370	7.59	14120	7.63	13880	7.70	13640	7.79	13430	7.91	13155	7.98
1130	15820	8.40	15625	8.55	15415	8.67	15200	8.78	14960	8.82	14730	8.89	14505	8.98	14275	9.07	14075	9.20
1180	16540	9.55	16350	9.71	16155	9.84	15950	9.96	15735	10.05	15505	10.08	15285	10.17	15065	10.26	14885	10.40

RPM	Fan Capacity - Cubic Feet Per Minute (CFM)																	
	1.250" S.P.		1.375" S.P.		1.500" S.P.		1.750" S.P.		2.000" S.P.		2.250" S.P.		2.500" S.P.		2.750" S.P.		3.000" S.P.	
	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP
690	3680	1.53	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
790	7030	2.99	6160	2.81	5140	2.56	-	-	-	-	-	-	-	-	-	-	-	-
865	8870	4.14	8320	4.05	7690	3.93	6055	3.50	3590	2.63	-	-	-	-	-	-	-	-
940	10320	5.44	9990	5.37	9550	5.30	8465	5.07	7070	4.67	4940	3.83	-	-	-	-	-	-
1005	11545	6.59	11185	6.63	10825	6.66	10085	6.44	9055	6.20	7690	5.73	5935	5.00	2295	3.10	-	-
1075	12860	8.04	12495	8.05	12160	8.09	11490	8.16	10795	7.89	9850	7.64	8635	7.18	7195	6.56	6325	6.13
1130	13815	9.27	13530	9.33	13180	9.35	12545	9.42	11975	9.32	11210	9.12	10300	8.85	9140	8.37	7825	7.76
1180	14655	10.49	14400	10.57	14130	10.63	13490	10.68	12880	10.76	12320	10.57	11555	10.34	10660	10.04	9540	9.53

Performance shown is for installation type A - Free inlet, Free outlet. Power rating (BHP) does not include drive losses. Performance ratings do not include the effects of appurtenances in the airstream. The AMCA Certified Ratings Seal applies to air capacities only.

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REX33B | BELT DRIVE



Model	A	B	C	D	E	F	H*	Approximate Ship Weight (LBS.)
REX33B	38	49 1/2	52 3/4	26 3/8	53 1/4	27 1/8	46	525

*Maximum for open motors and highest HP available for that size. All dimensions in inches.

Wheel Size	Inlet and Outlet	Tip Speed
Diameter = 36.50" Circumference = 9.55"	Inside Diameter = 49.50" Fan Outlet Area = 13.36 sq. ft.	9.55 x RPM

RPM	Fan Capacity - Cubic Feet Per Minute (CFM)																	
	0.125" S.P.		0.250" S.P.		0.375" S.P.		0.500" S.P.		0.625" S.P.		0.750" S.P.		0.875" S.P.		1.000" S.P.		1.125" S.P.	
	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP
485	10799	1.89	10067	1.96	9507	2.06	8915	2.10	8033	2.07	5573	1.64	720	0.58	-	-	-	-
515	11567	2.27	10850	2.33	10280	2.43	9787	2.50	9094	2.50	8146	2.45	5462	1.87	-	-	-	-
535	12078	2.55	11370	2.58	10800	2.70	10318	2.79	9740	2.82	8948	2.78	7207	2.42	3927	1.60	-	-
570	12964	3.09	12278	3.09	11705	3.20	11237	3.33	10781	3.43	10156	3.40	9345	3.35	7520	2.88	4455	2.02
600	13727	3.62	13056	3.59	12486	3.70	12008	3.84	11585	3.93	11101	3.99	10444	3.96	9621	3.88	7558	3.26
640	14743	4.39	14090	4.35	13529	4.46	13043	4.59	12627	4.70	12240	4.83	11745	4.91	11116	4.80	10320	4.70
710	16510	6.01	15890	5.95	15346	5.91	14867	6.10	14439	6.28	14063	6.37	13710	6.50	13324	6.83	12823	6.60
760	17774	7.40	17167	7.32	16641	7.30	16169	7.42	15739	7.58	15360	7.76	15012	7.89	14682	7.99	14330	8.14
805	18910	8.81	18306	8.70	17803	8.65	17336	8.74	16913	8.82	16524	9.08	16179	9.24	15864	9.38	15543	9.50
850	20043	10.39	19450	10.27	18959	10.21	18502	10.25	18084	10.36	17696	10.55	17341	10.75	17021	10.91	16726	11.06
885	20924	11.74	20339	11.60	19856	11.54	19470	11.54	18992	11.60	18610	11.78	18251	11.99	17929	12.20	17624	12.37
930	22054	13.65	21481	13.48	21005	13.39	20569	13.34	20159	13.36	19781	13.58	19425	13.80	19092	13.98	18792	14.19

RPM	Fan Capacity - Cubic Feet Per Minute (CFM)																	
	1.250" S.P.		1.375" S.P.		1.500" S.P.		1.750" S.P.		2.000" S.P.		2.250" S.P.		2.500" S.P.		2.750" S.P.		3.000" S.P.	
	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP
600	4600	2.33	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
640	8662	4.16	6264	3.42	2138	1.78	-	-	-	-	-	-	-	-	-	-	-	-
710	12236	6.55	11515	6.44	10297	6.04	5451	3.86	-	-	-	-	-	-	-	-	-	-
760	13881	8.09	13360	8.05	12789	7.98	10432	7.07	5954	4.80	-	-	-	-	-	-	-	-
805	15214	10.15	14806	10.33	14326	9.59	13165	9.42	10630	8.12	6145	5.60	-	-	-	-	-	-
850	16423	11.19	16119	11.29	15774	11.35	14820	11.25	13675	11.03	10792	9.30	6608	6.69	-	-	-	-
885	17345	12.48	17052	12.63	16757	12.74	15976	12.76	15050	12.63	13640	12.26	10556	10.19	6177	7.02	-	-
930	18504	14.35	18238	14.45	17960	14.59	17357	14.86	16559	14.78	15635	14.62	14191	14.17	11149	11.85	7160	8.70

Performance shown is for installation type A - Free inlet, Free outlet. Power rating (BHP) does not include drive losses. Performance ratings do not include the effects of appurtenances in the airstream. The AMCA Certified Ratings Seal applies to air capacities only.

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ENGINEERING SPECIFICATIONS

Model
 REX = Tubular, Centrifugal Inline Fan

Unit Size
 08, 12, 20, 27, 10, 14, 22, 33

Drive Type
 D = Direct Drive
 B = Belt Drive

Motor Tap
 V = 1050 RPM
 R = 1550 RPM
 T = 1140 RPM
 Q = 1750 RPM

Motor Speed
 1 = Single Speed
 2 = 2S2W 1800/1200
 3 = 2S1W 1800/300

Horse Power
 See selection software.

Enclosure
 O = Open Drip Proof
 T = Totally Enclosed
 E = Explosion Proof
 X = Special

Voltage
 See selection software.

Phase
 1 = Single
 3 = Three

Cycle
 5 = 50 Hz
 6 = 60 Hz

Efficiency
 S = Standard
 H = High Efficiency

Paint / Coating
 0 = None
 F = Epoxy Powder Coat*
 G = Epoxy Powder Coat with UV*
 H = Hi-Temp Powder Coat*
 J = Non-stick Powder Coat*
 K = Phenolic Powder Coat*
 L = Phenolic Powder Coat with UV*
 N = Polyester Powder Coat
 X = Special
 * Not available with choice of color.

Color
 0 = None
 50 = Chrome Green
 55 = Pale Green
 56 = Dove Gray
 61 = White
 63 = Oxford Beige
 65 = Dover White
 66 = Desert Tan
 70 = Black
 73 = Smoke Gray
 77 = Brick Red
 79 = Peppercorn
 81 = Pale Brown
 83 = Chocolate Brown
 85 = Timeless Bronze
 94 = Charcoal
 X = Special

Damper
 0 = None
 BDD = Back Draft Damper

Casing Bracket
 0 = None
 B = Bird Screen (Standard)

Motor Bracket
 0 = None
 M = Motor

Companion Angle Ring
 0 = None
 R = Ring

Support Legs
 0 = None
 L = Leg

Lube Lines
 0 = None
 L = Lube Lines

Zerk Lube Fitting
 0 = None
 F = Fitting

Vibration Fitting
 0 = None
 F = Fitting

Vibration Isolation
 0 = None
 RF = Run in Shear Floor
 RH = Rub in Shear Hanger
 SF = Spring Floor
 SH = Spring Hanger

Thermal Protection
 0 = None
 P = Thermal Protection

Disconnect Switch
 0 = None
 1 = NEMA 1
 3R = NEMA 3R Disconnect Switch
 4 = NEMA 4 Disconnect Switch
 7 = NEMA 7 Disconnect Switch
 9 = NEMA 9 Disconnect Switch
 X = Special

Internal Wiring
 0 = None
 3R = NEMA 3R Internal Wiring
 4 = NEMA 4 Internal Wiring
 X = Special

Speed Controller
 0 = None
 L = Loose
 M = Mounted

Firestat Switch
 0 = None
 S = Switch

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ENGINEERING SPECIFICATIONS

Centrex REX - Direct Drive Units

Direct drive centrifugal round inline fan shall be Centrex REX, manufactured by PennBarry.

The fan housing shall be aluminum have connecting flanges as an integral part of the unit for easy attachment to the duct work or connector. Fans shall incorporate a gasketed access panel. All moving parts shall be provided with vibration isolation. Statically and dynamically balanced backward inclined, centrifugal wheels shall be aluminum, spark-resistant, non-overloading, and riveted or riveted and welded. Wheels shall be matched to deeply spun venturis. Motors shall be continuous duty, permanently lubricated, mounted out of the main airstream, and furnished at the specified voltage, phase. Each fan shall bear the AMCA Licensed Ratings Seal for Air Performance, and shall be cULus listed.

Centrex REX - Belt Drive Units

Belt driven centrifugal round inline fan shall be Centrex REX, manufactured by PennBarry.

The housing shall be aluminum and have connecting flanges as an integral part of the unit for easy attachment to the duct work or connector. Fans shall incorporate a gasketed access panel. All moving parts shall be provided with vibration isolation. Statically and dynamically balanced backward inclined, centrifugal wheels shall be aluminum, spark-resistant, non-overloading, and matched to deeply spun venturis. Motors shall be continuous duty, ball bearing design, permanently lubricated, mounted out of the main airstream and furnished at the specified voltage, phase and enclosure. Shafts shall be turned, ground, and polished. Pulleys shall be adjustable, cast iron, machined, keyed, securely attached and sized for 150% of the horsepower at its rated maximum speed. Each fan shall bear the AMCA Licensed Ratings Seal for Air Performance and shall be cULus listed.



PennBarry Product Solutions

COMMERCIAL

Roof & Wall Exhaust Centrifugal Fans
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Square & Round Centrifugal Fans
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Hooded Roof Axial Fans
Upblast Roof Axial Fans
Gravity Ventilators
Roof Curbs

INDUSTRIAL

Utility Vent Sets
Freestanding Centrifugal Fans
Industrial & Material Handling Fans
Tubular Centrifugal Inline Fans
Mixed Flow Centrifugal Fans
Plug & Plenum Fans
Wall Mounted Propeller Fans
Tube Axial Fans
Vane Axial Fans
Bifurcator Fans
Fume Exhaust

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Indoor Units

KITCHEN VENTILATION

Kitchen Hoods
Make-Up Air Units
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