



PENNBARRY™

Moving Your Way

Hi-EX

Roof Ventilator

TABLE OF CONTENTS

Introduction	2
Certifications & Listings, Features & Benefits	3
Options & Accessories	4
Dimensional Data and Selection Criteria	5
Performance Data	9
Engineering Specifications	14



BULLETIN HX15

INTRODUCTION

Hi-Ex Series of Roof Ventilators

A continuing demand exists in commercial and industrial buildings for high velocity roof ventilators which exhaust foul air and disperse it high above the roof. The Hi-Ex is ideal for the “spot” ventilation of specific problem areas where rapid air removal is necessary or for general plant ventilation. This “plug-in” or package ventilation is easily installed out of the way, up on the roof. It is accessible and yet does not use valuable interior areas nor does it require costly duct systems.

Dampers open automatically when the fan is started. The airstream holds the dampers open and excludes weather until the power is shut off. Then, the dampers automatically close tight as the air blast diminishes.

The direct drive Hi-Ex illustrated above-left is a solid, compact unit completely self-contained. The standard silhouette is streamlined and the straight-thru air blast provides rapid, friction-free, air removal. Note the components are all within the housing. They do not intrude, nor protrude, below the roof line. Two types of belt drive fans are available. One with the motor out of the airstream and the other with the motor inside the ventilator air shaft. Both arrangements permit capacity selections at fan speeds other than standard motor speeds. They enable the adjustment of air volumes on the job if necessary. Your fan schedule specification should indicate “remote drive” if desired.

Standard Height Units

Model: HC - Cast Aluminum Propeller

- Static pressure up to 1.0” wg.
- Direct Drive - Flow capacity up to 33,000 CFM
- Belt Drive - Flow capacity up to 70,000 CFM

Model: HX - Cast Aluminum Propeller

- Static pressure up to 0.75” wg.
- Direct Drive - Flow capacity up to 38,000 CFM
- Belt Drive - Flow capacity up to 33,000 CFM

Model: HF - Fabricated Steel Propeller

- Static pressure up to 0.5” wg.
- Belt Drive - Flow capacity up to 51,000 CFM

HiteSaver Units

Model: HZ - Cast Aluminum Propeller

- Static pressure up to 0.75” wg.
- Direct Drive - Flow capacity up to 45,000 CFM
- Belt Drive - Flow capacity up to 82,000 CFM

Model: HS Fabricated Steel Propeller

- Static pressure up to 0.5” wg.
- Belt Drive - Flow capacity up to 50,000 CFM

Heat & Smoke Units

Model: HS - With Heat & Smoke Exhaust Option

- Fabricated steel propeller
- Static pressure up to 0.5” wg.
- Remote Belt Drive - Flow capacity up to 50,000 CFM

Hi-Ex
Direct Drive
Model HC



Hi-Ex
Belt Drive
Model HZ



Hi-Ex
Belt Drive
Model HF



CERTIFICATIONS & LISTINGS



AMCA Certification

PennBarry certifies that models HS 30–48 roof exhausters on page 13 are licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 211 and Publication 311 and comply with the requirements of the AMCA Certified Ratings Program.

UL and cUL Certification



Hi-Ex exhausters (models HC, HF, and HS) carry the UL label, UL705 (ZACT/ZACT7), file #E28413. Model HS with heat and smoke option carries the UL label, UL793 (ZAXH/ZAXH7), file #MH19473.

FEATURES & BENEFITS

Fan Blades

The design of fan blades has been very carefully determined to insure highly efficient performance. Cast aluminum, airfoil, or die-formed high capacity steel fan blades provide the flexibility required to achieve most fan performance ratings. Spark resistant fans use blades cast of high tensile strength aluminum alloy. Versatility is accomplished through the use of four and six blade fans which exhaust an even flow. All blades are balanced to run properly.

Venturi Inlet

Combined with a heavy gauge base is a one-piece, leakproof, spun and streamlined venturi inlet to minimize entrance losses and noise.

Gun Barrel Design

Straight-thru air blast, minimal stack obstructions and absence of caps assure full fan capacity and prevent re-entry of exhausted air through adjacent fresh air intakes or windows. Contaminated air does not damage roof surfaces.

Weather Resistant Operation

Air blast turns back rain and snow, and provides an air curtain to keep out the elements. Full size windband protects the dampers while open.

Simplified Construction

HI-EX fans require little maintenance. They are ruggedly built of heavy metal, securely welded and thoroughly reinforced with beading and angle rings. When properly installed, they will withstand high winds. Flutter guards are standard with the HI-EX and provide extra protection against damper flutter due to pressure difference.

Damper Assembly

The damper assembly consists of a number of components and features:

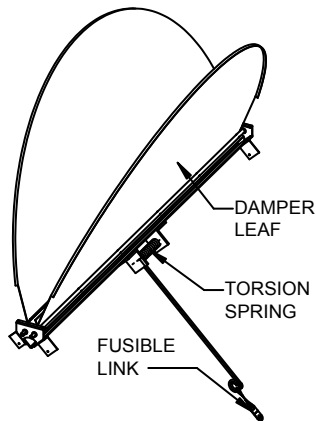
- Dampers automatically overlap the air shaft to prevent heat losses and backdrafts.
- Damper bearings: The trouble-free damper bearing assembly provides long wearing surfaces at the pivot points.
- Damper Shafts: Mounted in oil-less brass or nylon bearings allowing the assembly to operate freely without binding and require no further attention or lubrication.
- Drainage Trough: Centrally located to allow water to run off as required.
- Easily Removable: The complete damper assembly is easily removable to gain access to the internal fan components, if required.
- End Pivot Damper Arrangement: The design of the end pivot damper arrangement utilizes the full force of the fan at the blade tips. This maximizes lift, employs the complete working area of the blades, and eliminates dead spots at the center of the hub of the fan.
- Rubber Gasketing: Fitted around the air shaft to help seal the damper opening and also to eliminate noise upon closure.
- Rubber Stops: Used to prevent the dampers from locking in the open position, rubber stops are installed on the upper wind band support.



OPTIONS & ACCESSORIES

Fire and Smoke Damper (HS Only)

Optional fire and smoke damper provision enables dampers to automatically open in a fire emergency. A sturdy steel, high torsion, special alloy spring arrangement, retained by a heat sensitive fusible link, can be incorporated to provide this protection. This action is independent of fan operation and is activated by UL listed links with pre-determined melting points.



This feature has been widely employed in industrial plant ventilation to permit the escape of noxious, blinding smoke as well as super-heated air and the gases present during a fire. It is recommended by insurance underwriting authorities and safety officials.

Fan Guards

Since Hi-Ex fans contain rotating parts, PennBarry recommends the following safety precautions be taken during installation, operation, and maintenance. Install fan guards on all nonducted fan installations to protect people working around the fan from accidental falling debris and to protect the fan from foreign objects coming into contact with moving parts. Inlet fan guards for HiteSaver models HS and HZ must be fabricated locally. For proper and safe operation, fan RPM should not exceed that recommended in performance tables. Installations that result in excessive vibration are unacceptable. Designers should urge contractors to refer to operation, maintenance, and instruction manuals for proper and acceptable levels of vibration.

Safety Disconnect Switches

UL listed, non-fused, safety disconnect switches can be provided to match system electrical characteristics. These can be furnished in a weatherproof enclosure specifically designed for outdoor installation; or, under the motor weather cover in remote drive belted units. Disconnect switches are to be field wired by a licensed electrician.



Latches

For areas of high wind and interior positive pressure, magnetic latches and/or air activated positive locking latches are also available for factory or field mounting. These latches help to minimize flutter and keep dampers closed when the fan is not in operation.

Finishes

Coatings such as air dry enamel, epoxy, or heresite are available upon request. See the coatings brochure for details.

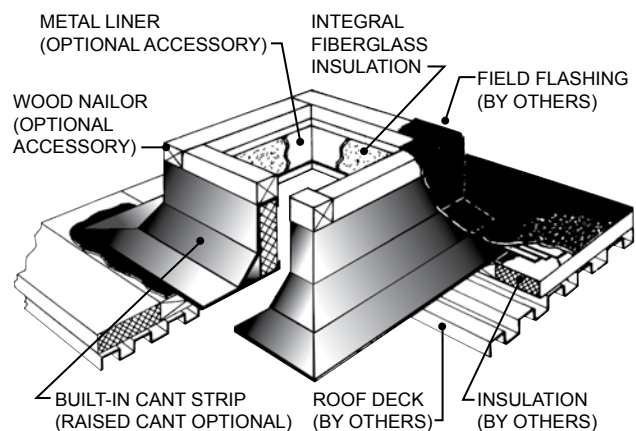
Helper Springs

When extra assistance is required to open dampers under low velocity conditions, helper springs are available. They are recommended for applications where the throat velocity is under 1300 FPM and where the low speed of a two speed motor will be used.

Roof Curbs

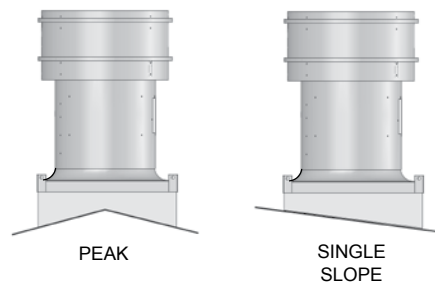
Roof curbs are furnished in a variety of types from canted or self-flashing to sloped or flat pitch. Standard construction includes galvanized or aluminum material, insulation, and metal, rubber gasketing or wooden nailer mounting surface. See the Roof Curbs brochure for details.

Illustrated below is the Unibeam Curb, which is most generally used with Hi-Ex vertical discharge ventilators. Costs of this device are normally less than field built curbs. The Unibeam Curb shown is for flat roof installation.



Peaked or Sloped Curbs

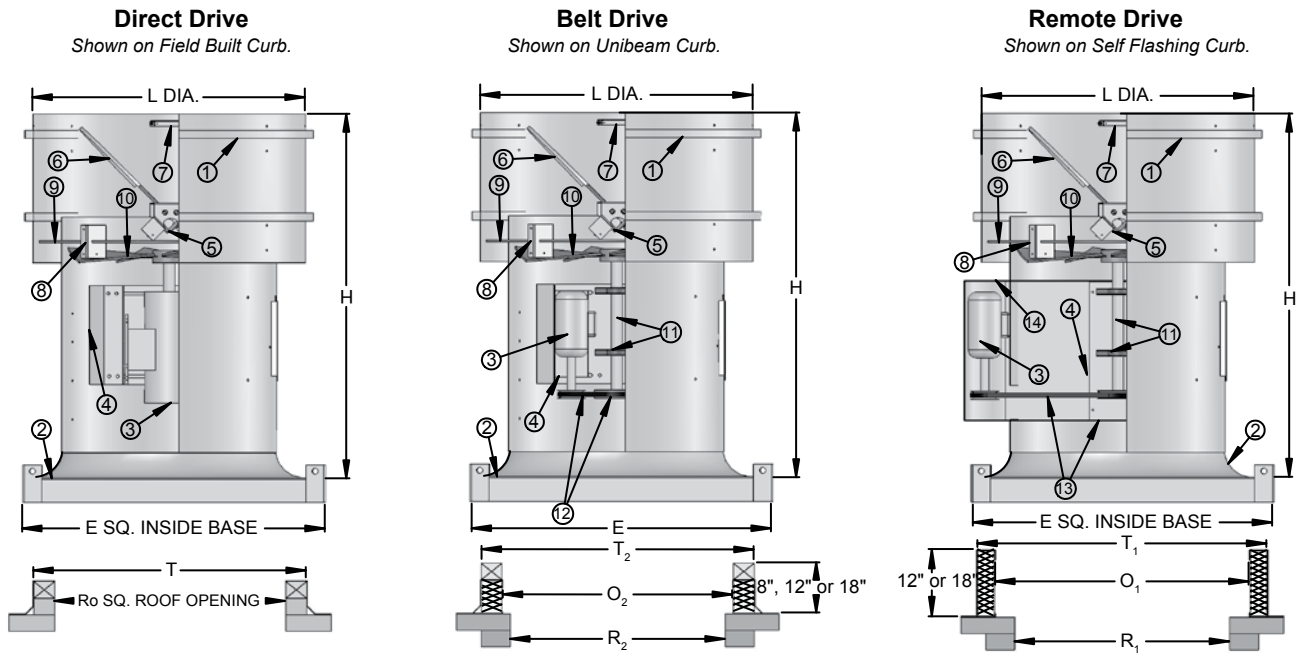
Whether the installation is on the peak or a single slope of the building, the Unibeam Curb will accommodate the application. Each curb is custom built to meet the needs of the project.



HC, HX, HF | STANDARD HEIGHT

HI-EX ventilators are available in three standard drive arrangements. Direct drive fans have blades on the motor shaft. Belt drive units are available for general ventilation conditions where the motor and drive components are installed within the ventilator air shaft to take advantage of airstream cooling action. The exhausting air washes the motor and bearings, increasing longevity of these components.

In applications where heat or dirt laden air is being removed, belt drive units can be furnished with the motor installed outside the air shaft, under a separate weather cover. In extremely corrosive applications the fan bearings, belts and fan shaft can be encased in a protective housing.



- 1. Protective Windband and Stiffening Beads
- 2. Spun Venturi and Mounting Base
- 3. Ball Bearing Motor
- 4. Drive Support Assembly
- 5. Drainage Gutter
- 6. Butterfly Damper Assembly
- 7. Damper Stop—Rubber Cushioned
- 8. Supporting Brackets
- 9. Flutter Guards
- 10. Axial Impeller
- 11. Fan Shaft and Bearings (Belt Drive)
- 12. Belt and Pulleys
- 13. Belt and Bearing Enclosures with Air Guide (Optional)
- 14. Motor Weather Cover

Size	A	H	L	Ro	T	E	Unit Weight		Self Flashing Curb			Fabricated Unibeam Curb			Gauges*	
							Steel	Alum.	R1	O1	T1	R2	O2	T2	Alum.	Steel
24	26	40 1/2	33	26	33 1/2	36	240	200	26	31 1/2	35 1/2	26	30 1/2	34 1/2	12-18	16-20
30	32	44	36	32	39 1/2	42	340	280	32	37 1/2	41 1/2	32	36 1/2	40 1/2	12-16	16-20
36	38	50	42	38	45 1/2	48	440	350	38	43 1/2	47 1/2	38	42 1/2	46 1/2	12-16	16-20
42	44	51	48	44	51 1/2	54	600	500	44	49 1/2	53 1/2	44	48 1/2	52 1/2	12-14	14-18
48	50	59	54	51	58 1/2	60	700	650	51	56 1/2	59 1/2	51	55 1/2	58 1/2	12-14	14-18
54	56	62	60	57	64 1/2	66	900	800	57	62 1/2	65 1/2	57	61 1/2	64 1/2	10-14	14-18
60	62	65	66	63	70 1/2	72	1000	900	63	68 1/2	71 1/2	63	67 1/2	70 1/2	10-14	14-16
72	74	66 1/2	81	75	82 1/2	84	1150	1100	75	80 1/2	83 1/2	75	79 1/2	82 1/2	8-14	14-16

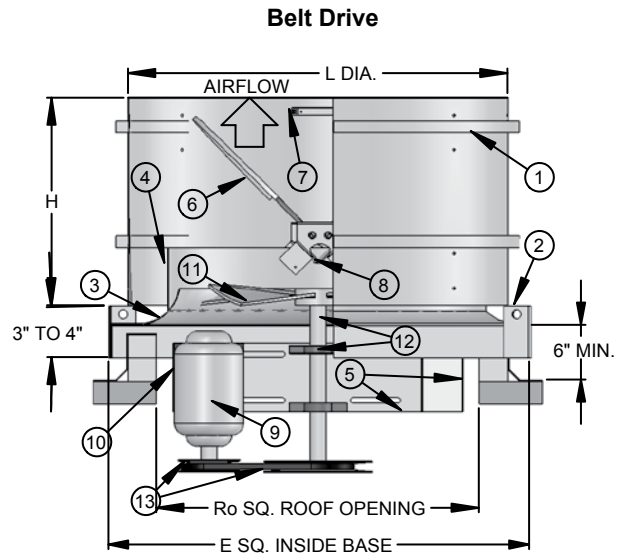
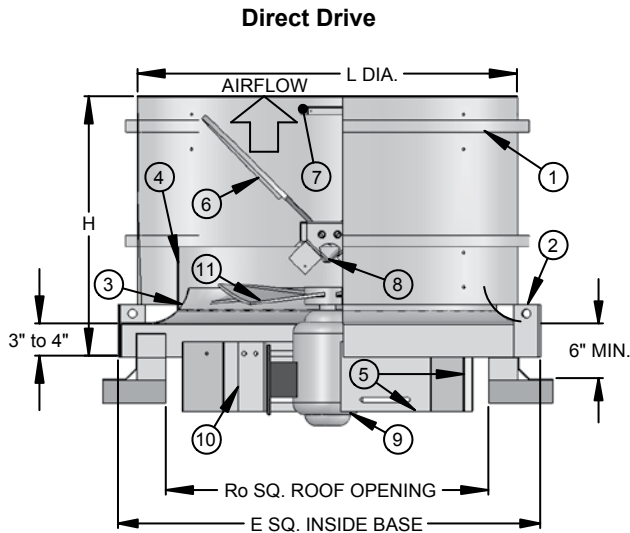
All dimensions in inches. *First gauges are for mounting bases. Second gauges are for windbands and air shafts. Although mounting base dimensions are standard, adapters and modifications are available when needed. Ask for certified dimension drawings before proceeding since dimensions do change.

©PENNBARRY 2017

HZ | HITESAVER (LOW PROFILE)

For applications where height is a consideration, PennBarry offers the HiteSaver, Model HZ. The HiteSaver features an extra-low profile. The propeller, motor and drive are recessed into the roof opening and extend below the roof line. This design provides for convenient access from the building interior when structural members provide clearance.

The windband is constructed of galvanized steel and contains two reinforcing ribs. This assembly is supported by the curb base and steel brackets. The curb base is all-welded heavy gauge galvanized steel with a deep spun venturi to smooth airflow. External bracing provides extra rigidity. Integral lifting lugs are included.



- 1. Protective Windband (Ribbed Reinforced)
- 2. Curb Base with Lifting Lugs
- 3. Venturi-type Orifice
- 4. Throat with Top Gasket
- 5. Welded Steel Internal Bracing
- 6. Butterfly Damper Assembly
- 7. Damper Stop—Rubber Cushioned
- 8. Rain Channel and Damper Bearings
- 9. Ball Bearing Motor
- 10. Motor Mounting Plate
- 11. Propeller (Cast Aluminum Airfoil)
- 12. Fan Shaft and Bearings (Belt Drive)
- 13. Belt and Pulleys (Belt Drive)

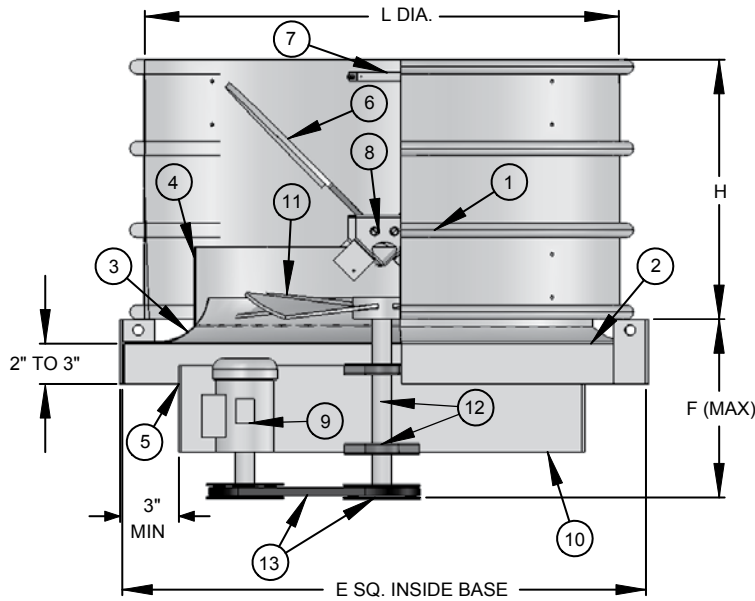
Size	H	L Diameter	Ro	E SQ.	F Maximum		Approximate Ship Weight	
					Direct	Belt	Direct	Belt
24	24	33	30 1/2	36	15	16 1/2	200	230
30	24	36	36 1/2	42	16	17 1/2	230	290
36	28	42	42 1/2	48	18	20	310	400
42	30	48	48 1/2	54	20	22	380	550
48	31	54	54 1/2	60	22	22	490	640
54	34	60	60 1/2	66	24	22	580	740
60	36	66	66 1/2	72	24	22	710	900
72	39 1/2	81	78 1/2	84	-	27	-	1030

All weights in lbs. All dimensions in inches.

HS | HITESAVER (LOW PROFILE)

For applications where height is a consideration, PennBarry also offers the HiteSaver, Model HS. The HiteSaver features an extra-low profile. The propeller, motor, and drive are recessed into the roof opening and extend below the roof line. This design provides for convenient access from the building interior when structural members provide clearance.

The windband is constructed of galvanized steel and contains two reinforcing ribs. This assembly is supported by the curb base and steel brackets. The curb base is all-welded heavy gauge galvanized steel with a deep spun venturi to smooth airflow. External bracing provides extra rigidity. Integral lifting lugs are included.



1. Protective Windband (Ribbed Reinforced)
2. Curb Base
3. Venturi-type Orifice
4. Throat with Top Gasket
5. Welded Steel Internal Bracing
6. Butterfly Damper Assembly
7. Damper Stop — Rubber Cushioned
8. Rain Channel and Damper Bearings
9. Ball Bearing Motor
10. Motor Mounting Plate
11. Propeller (Fabricated Steel)
12. Fan Shaft and Bearings
13. Belt and Pulleys

Size	H	L Diameter	Ro	E SQ.	F (MAX)
24	24	33	30	33 1/2	15
30	24	36	34	38 1/2	15
36	26	42	40	44 1/2	15
42	30	48	46	50 1/2	18
48	32	54	52	56 1/2	18
54	34	60	61 1/2	66	18
60	36	66	67 1/2	72	18

All dimensions in inches.

HS | HITESAVER, HEAT & SMOKE EXHAUST PACKAGE

- 1000°F for minimum 15 minutes (SBCCI “Standard Fire Prevention Code”)
- 500°F for 4 hours (IRI Requirement)
- UL listed “Power Ventilators for Smoke Control Systems”, which includes UL 705 “Power Ventilators” and UL793 “Automatically Operated Roof Vents for Smoke and Heat”. This testing includes Snow Load, Dust Load, and Cycling Tests for butterfly dampers.

While these fans are commonly used for general ventilation, when equipped with Heat and Smoke option, this series of fans incorporates features exclusively designed to exhaust heat and smoke in the event of fire. During these emergencies, the fans are designed to operate at the temperature and minimum time limits stated. To maintain power to these fans during emergencies, special consideration must be made for field power supply. In the event that power is disrupted, fusible links melt when the temperature exceeds 165°F, at which point the unit functions as a gravity exhaust ventilator. In the event of an emergency, if power is maintained, the units will operate for the minimum times and temperatures indicated, after which they will continue to operate until they are destroyed by the extreme temperature generated during an actual fire, or the roof structure collapses.

Aspirated Belt and Bearing Cover

Shields critical drive components from high temperature airstream. Cool ambient air is drawn through the enclosure to maintain temperature during emergency operation.

Vented and Aspirated Motor Compartment

Cool ambient air is drawn through the motor compartment to assure temperature around the motor does not exceed safe limits.

Two Groove Pulleys

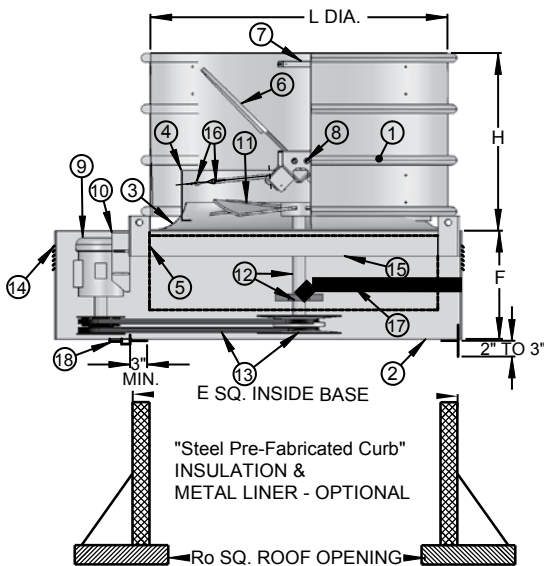
Sized for minimum 200% of installed horsepower, each belt is capable of handling the complete load. This provides maximum reliability and safety.

Galvanized Steel Damper Blades

Provide higher temperature resistance and better durability than aluminum blades used for exclusive general ventilation applications.

Service Access Panel

Allows access to bearings and belts for routine inspection and maintenance when fans are used for general ventilation. Regular inspection and maintenance helps assure that Heat and Smoke exhaust fans operate as intended when emergency smoke removal is required.



1. Protective Windband (Ribbed Reinforced)
2. Curb Base
3. Venturi-type Orifice
4. Throat with Top Gasket
5. Welded Steel Internal Bracing
6. Butterfly Damper Assembly
7. Damper-Stop Rubber Cushioned
8. Rain Channel & Damper Bearings
9. Ball Bearing Motor
10. Motor Mounting Plate
11. Propeller (Fabricated Steel)
12. Fan Shaft & Bearings
13. Belt & Pulleys (Double Groove Min. High Temperature Belts)
14. Motor Weather Cover (Remote Drive)
15. Belt & Bearing Breather Duct Enclosure
16. Torsion Springs & Fusible Links - 165°F
17. Extended Grease Lines & Fittings (Optional)
18. Disconnect Switch - (Optional Remote Outside Mount)

Model	HS24	HS30	HS36	HS42	HS48	HS54	HS60
L Dia	33	36	42	48	54	60	66
H	24	24	26	30	32	34	36
†E ^{sq.}	33 1/2	38 1/2	44 1/2	50 1/2	56 1/2	66	72
Ro ^{sq.}	30	34	40	46	52	61 1/2	67 1/2
F ^{MAX.}	24	24	24	24	24	24	24

†Outside dimension of curb should be 1 1/2" less than 'E' dimension. All dimensions in inches. Must specify heat and smoke option when ordering.

HC | STANDARD HEIGHT

Direct Drive

Model	RPM	Tip Speed FPM	Fan Capacity - CFM													
			0" S.P.		.125" S.P.		.250" S.P.		.375" S.P.		.500" S.P.		.750" S.P.		1.000" S.P.	
			CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP
HC24T1	1140	7163	5050	0.32	4530	0.35	3775	0.36	2920	0.36	2230	0.38	-	-	-	-
HC24T2	1140	7163	7220	0.95	6160	0.94	4875	0.94	3510	0.93	2190	0.94	-	-	-	-
HC24Q	1750	10996	7750	1.15	7435	1.18	7090	1.23	6665	1.27	6140	1.29	5155	1.30	4070	1.32
HC30W1	860	6754	8200	0.38	7200	0.42	5940	0.44	3760	0.43	1610	0.42	-	-	-	-
HC30W2	860	6754	9470	0.64	8495	0.65	7440	0.66	5815	0.65	2930	0.68	-	-	-	-
HC30T1	1140	8954	10870	0.88	10165	0.95	9345	0.99	8500	1.03	7230	1.04	3615	0.97	1250	1.19
HC30T2	1140	8954	12555	1.48	11820	1.50	11075	1.52	10290	1.54	9475	1.56	6410	1.51	-	-
HC36W1	860	8105	11975	0.86	10490	0.90	8730	0.93	5585	0.96	2465	1.1	-	-	-	-
HC36W2	860	8105	15690	1.71	14690	1.78	13565	1.83	12050	1.85	10420	1.82	4935	1.63	-	-
HC42W1	860	9456	20440	1.92	18765	2.00	17025	2.02	15005	2.09	10935	2.17	-	-	-	-
HC42W2	860	9456	23105	3.59	21970	3.69	20705	3.75	19235	3.75	17225	3.77	12550	3.74	7365	3.53
HC48W1	860	10807	30135	3.99	28195	4.07	26140	4.15	23890	4.22	21345	4.32	-	-	-	-
HC48W2	860	10807	33030	5.65	31415	5.74	29705	5.83	27900	5.89	25930	5.89	21325	5.74	13025	5.37

Belt Drive

Model	RPM	Tip Speed FPM	Fan Capacity - CFM													
			0" S.P.		.125" S.P.		.250" S.P.		.375" S.P.		.500" S.P.		.750" S.P.		1.000" S.P.	
			CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP
HC24	1105	6943	4895	0.29	4350	0.32	3610	0.33	2730	0.33	2015	0.35	-	-	-	-
	1265	7948	5600	0.43	5150	0.46	4505	0.49	3850	0.49	3080	0.49	1895	0.55	-	-
	1450	9111	6420	0.65	6030	0.68	5555	0.72	4935	0.74	4370	0.74	3030	0.77	2115	0.83
	1595	10022	7065	0.87	6715	0.90	6315	0.95	5800	0.97	5240	0.99	4080	0.98	3045	1.05
HC30	890	6990	8485	0.42	7525	0.46	6415	0.49	4545	0.48	2120	0.45	-	-	-	-
	1020	8011	9725	0.63	8920	0.69	8025	0.72	6785	0.74	5075	0.72	-	-	-	-
	1125	8836	10725	0.84	10010	0.92	9180	0.95	8310	0.99	6980	1.00	3300	0.92	-	-
	1285	10092	12250	1.26	11640	1.35	10925	1.40	10200	1.44	9430	1.48	6985	1.46	3525	1.37
HC36	635	5985	11585	0.69	10150	0.73	8080	0.74	4455	0.67	-	-	-	-	-	-
	700	6597	12770	0.92	11500	0.97	9780	1.00	7590	0.97	3955	0.88	-	-	-	-
	800	7540	14595	1.37	13515	1.44	12225	1.48	10490	1.48	8455	1.44	-	-	-	-
	880	8294	16055	1.83	15085	1.90	13970	1.96	12550	1.98	10995	1.96	5575	1.75	-	-
HC42	1010	9519	18425	2.76	17595	2.85	16675	2.92	15660	2.98	14340	2.99	11415	2.92	6280	2.64
	550	6048	14775	0.94	12845	0.98	9775	0.98	5870	0.94	-	-	-	-	-	-
	630	6927	16925	1.41	15300	1.47	13025	1.48	9945	1.47	6495	1.40	-	-	-	-
	695	7642	18670	1.89	17225	1.97	15450	1.98	12895	1.99	9895	1.97	-	-	-	-
HC48	795	8742	21360	2.84	20120	2.92	18705	2.96	16840	2.98	14570	2.97	9240	2.85	-	-
	945	10391	25390	4.76	24365	4.88	23250	4.95	22055	4.97	20445	5.00	16600	4.98	12085	4.85
	540	6786	20740	1.40	18060	1.45	14775	1.44	9805	1.35	-	-	-	-	-	-
	600	7540	23045	1.92	20660	1.98	17935	2.00	14605	1.94	8295	1.82	-	-	-	-
HC54	685	8608	26310	2.86	24245	2.93	21995	2.98	19410	2.96	16410	2.88	-	-	-	-
	810	10179	31110	4.72	29385	4.81	27565	4.89	25595	4.93	23415	4.91	18515	4.72	-	-
	490	6927	24440	1.42	21575	1.45	17145	1.46	8235	1.28	-	-	-	-	-	-
	540	7634	26935	1.91	24340	1.94	20700	1.96	16030	1.91	6050	1.66	-	-	-	-
HC60	620	8765	30925	2.89	28635	2.93	26230	2.95	22335	2.99	18175	2.88	-	-	-	-
	735	10391	36660	4.81	34710	4.88	32850	4.88	30545	4.92	27160	4.97	19780	4.70	5555	4.28
	845	11946	42145	7.31	40440	7.40	38825	7.42	37225	7.43	35025	7.48	29435	7.50	22375	7.11
	405	6362	33770	2.84	30170	2.90	26070	2.94	19320	2.87	10155	3.27	-	-	-	-
HC72	480	7540	40025	4.72	37180	4.80	33695	4.85	30175	4.90	25550	4.88	10765	5.64	4540	6.67
	550	8639	45865	7.11	43465	7.20	40505	7.26	37480	7.32	34370	7.37	19420	7.25	11975	8.56
	610	9582	50865	9.70	48745	9.80	46165	9.88	43455	9.95	40720	10.00	34505	10.04	18385	10.39
	453	8539	55686	5.28	47552	4.87	38271	5.02	27528	5.36	-	-	-	-	-	-
HC72	519	9783	63799	7.94	56508	7.39	49398	7.41	40308	7.60	30942	8.1	-	-	-	-
	572	10782	70314	10.63	63532	9.94	57585	9.81	49889	10.07	41375	10.33	-	-	-	-

Power rating BHP does not include transmission losses. Performance certified is for installation type A – Free inlet, Free outlet. Performance ratings do not include the effects of appurtenances. The sound ratings shown are loudness values in fan sones at 1.5 m (5 ft) in a hemispherical free field calculated per AMCA International Standard 301. Values shown are for: Installation Type A: free inlet hemispherical sone levels. Explosion proof motors and disconnects are available when specified.

HX | STANDARD HEIGHT

Direct Drive

Model	RPM	Tip Speed FPM	Fan Capacity - CFM													
			0" S.P.		.125" S.P.		.250" S.P.		.375" S.P.		.500" S.P.		.625" S.P.		.750" S.P.	
			CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP
HX24W	860	5405	5590	0.45	4240	0.45	1820	0.45	-	-	-	-	-	-	-	-
HX24T	1140	7163	7410	1.04	6645	1.04	5215	1.05	3270	1.08	1770	1.15	-	-	-	-
HX30W	860	6754	8950	0.63	7250	0.65	5625	0.65	3725	0.64	-	-	-	-	-	-
HX30T	1140	8954	11865	1.46	10770	1.50	9050	1.51	8305	1.56	6735	1.50	5400	1.50	-	-
HX36W	860	8105	13920	1.22	12525	1.28	10520	1.30	6615	1.26	1715	1.43	-	-	-	-
HX36T	1140	10744	14860	1.51	13350	1.52	11540	1.60	9310	1.68	5810	1.70	2215	1.79	-	-
HX36Q	1750	16493	20255	4.18	19185	4.26	18025	4.34	16775	4.40	15430	4.44	13990	4.50	12500	4.61
HX42W1	860	9456	23245	3.04	20375	3.12	17980	3.12	14050	3.12	9520	3.24	4770	3.48	-	-
HX42W2	860	9456	19765	1.84	17930	1.99	16155	2.08	14020	2.19	10985	2.22	6270	2.29	2045	2.51
HX42T	1140	12535	27515	4.71	25410	5.04	23035	5.27	20595	5.43	18025	5.50	14955	5.50	10015	5.41
HX48M	690	8671	30920	3.81	27585	3.96	23330	4.06	17050	3.85	10595	3.95	4195	4.52	-	-
HX48W	860	10807	38540	7.38	36000	7.56	32955	7.73	29445	7.86	25915	7.86	19185	7.41	14155	7.59

Belt Drive

Model	RPM	Tip Speed FPM	Fan Capacity - CFM													
			0" S.P.		.125" S.P.		.250" S.P.		.375" S.P.		.500" S.P.		.625" S.P.		.750" S.P.	
			CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP
HX24	780	4901	5070	0.33	3400	0.34	970	0.39	-	-	-	-	-	-	-	-
	1025	6440	6665	0.75	5720	0.75	3875	0.84	1915	0.79	525	1.06	-	-	-	-
	1290	8105	8385	1.50	7770	1.50	6695	1.50	5155	1.64	3450	1.53	2150	1.63	1015	1.97
HX30	780	6126	8120	0.47	6015	0.49	4330	0.48	1595	0.54	-	-	-	-	-	-
	980	7697	10200	0.92	8950	0.96	7395	1.00	5715	0.95	4015	0.95	-	-	-	-
	1235	9700	12855	1.85	11755	1.91	10655	1.92	9455	1.99	8440	1.96	6875	1.90	5650	1.90
HX36	785	7398	12705	0.93	11110	0.98	9140	0.99	2920	1.02	-	-	-	-	-	-
	990	9331	16025	1.86	14875	1.94	13330	1.98	12100	1.98	7475	1.92	2885	2.10	-	-
HX42	670	7367	15400	0.87	13045	0.97	10305	1.04	5270	1.08	-	-	-	-	-	-
	765	8412	17580	1.30	15520	1.42	13405	1.50	10440	1.56	5325	1.62	-	-	-	-
	965	10611	22180	2.60	20545	2.77	18910	2.90	17260	2.99	15210	3.11	12450	3.14	8605	3.22
HX48	545	6849	24425	1.88	19780	1.99	12230	1.89	4740	2.12	-	-	-	-	-	-
	625	7854	28010	2.83	24205	2.96	19640	3.02	11390	2.88	4885	3.25	-	-	-	-
	740	9299	33160	4.70	30110	4.86	26230	5.00	22045	4.99	14690	4.75	10210	4.90	2050	5.92

Power rating BHP does not include transmission losses. Performance certified is for installation type A – Free inlet, Free outlet. Performance ratings do not include the effects of appurtenances. The sound ratings shown are loudness values in fan zones at 1.5 m (5 ft) in a hemispherical free field calculated per AMCA International Standard 301. Values shown are for: Installation Type A: free inlet hemispherical zone levels. Explosion proof motors and disconnects are available when specified.

HF | STANDARD HEIGHT

Belt Drive

Model	RPM	Tip Speed FPM	Fan Capacity - CFM									
			0" S.P.		.125" S.P.		.250" S.P.		.375" S.P.		.500" S.P.	
			CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP
HF24	611	3839	4890	0.30	4075	0.30	2565	0.29	1735	0.33	-	-
	672	4222	5375	0.39	4685	0.40	3190	0.38	2325	0.41	-	-
	750	4712	6000	0.55	5410	0.55	4190	0.52	3155	0.54	2495	0.58
	857	5385	6855	0.82	6320	0.81	5680	0.81	4320	0.78	3550	0.80
	943	5925	7545	1.09	7065	1.08	6555	1.10	5470	1.04	4425	1.04
HF30	440	3456	6640	0.29	4525	0.28	2280	0.31	-	-	-	-
	484	3801	7305	0.39	5655	0.38	2450	0.40	-	-	-	-
	538	4225	8120	0.54	6775	0.54	3815	0.52	2775	0.57	-	-
	615	4830	9280	0.80	8225	0.82	6190	0.76	3530	0.80	3085	0.86
	678	5325	10230	1.08	9335	1.10	7845	1.05	5205	1.02	3325	1.10
	775	6087	11695	1.61	10970	1.64	9860	1.62	8200	1.54	5785	1.53
HF36	370	3487	9445	0.40	6950	0.37	-	-	-	-	-	-
	412	3883	10515	0.55	8265	0.52	3875	0.51	-	-	-	-
	470	4430	11995	0.82	10120	0.78	7570	0.75	3135	0.78	-	-
	520	4901	13270	1.11	11640	1.07	9705	1.02	5585	1.02	-	-
	594	5598	15160	1.65	13815	1.60	12060	1.56	10115	1.51	6090	1.52
	654	6164	16690	2.20	15500	2.15	13980	2.10	12530	2.05	10190	2.02
	750	7069	19140	3.32	18135	3.26	16895	3.20	15505	3.15	14275	3.08
HF42	391	4299	14530	0.81	12940	0.81	7480	0.80	-	-	-	-
	430	4728	15980	1.08	14735	1.09	10485	1.05	5830	1.13	-	-
	492	5410	18285	1.62	17370	1.64	15090	1.57	10210	1.59	-	-
	542	5960	20145	2.17	19355	2.19	17765	2.15	14030	2.09	9765	2.14
	620	6817	23040	3.25	22410	3.28	21370	3.28	19555	3.17	15760	3.13
	735	8082	27315	5.41	26830	5.45	26115	5.47	25090	5.45	23665	5.30
HF48	323	4059	18195	0.81	13475	0.82	-	-	-	-	-	-
	355	4461	20000	1.08	16030	1.09	9080	1.13	-	-	-	-
	407	5115	22930	1.62	19810	1.65	14585	1.65	-	-	-	-
	448	5630	25235	2.16	22595	2.20	18310	2.20	12585	2.24	-	-
	513	6447	28900	3.25	26810	3.30	23500	3.30	19230	3.30	14060	3.37
	608	7640	34250	5.41	32680	5.49	30245	5.49	27235	5.49	23625	5.50
HF54	280	3958	21780	1.03	15715	1.10	-	-	-	-	-	-
	320	4524	24890	1.54	19790	1.64	-	-	-	-	-	-
	353	4990	27455	2.07	22850	2.20	16190	2.13	-	-	-	-
	404	5711	31420	3.10	27635	3.27	23095	3.30	12535	3.06	-	-
	480	6786	37335	5.20	34275	5.43	30515	5.52	26670	5.53	17330	5.23
	549	7761	42700	7.78	40015	8.07	36910	8.22	33770	8.26	30200	8.26
HF60	290	4555	27105	1.60	23545	1.63	15305	1.67	-	-	-	-
	320	5027	29905	2.15	26900	2.19	20570	2.19	12145	2.25	-	-
	366	5749	34205	3.22	31845	3.26	27985	3.30	20685	3.32	13335	3.38
	435	6833	40655	5.40	38755	5.44	36120	5.51	32440	5.54	26065	5.52
	497	7807	46450	8.06	44855	8.08	42835	8.17	40160	8.23	36690	8.25
	547	8592	51120	10.74	49770	10.76	48070	10.86	45790	10.94	43175	10.99

Power rating BHP does not include transmission losses. Performance certified is for installation type A – Free inlet, Free outlet. Performance ratings do not include the effects of appurtenances. The sound ratings shown are loudness values in fan sones at 1.5 m (5 ft) in a hemispherical free field calculated per AMCA International Standard 301. Values shown are for: Installation Type A: free inlet hemispherical sone levels. Explosion proof motors and disconnects are available when specified.

HZ | HITESAVER (LOW PROFILE)

Direct Drive

Model	RPM	Tip Speed FPM	Fan Capacity - CFM									
			0" S.P.		.125" S.P.		.250" S.P.		.500" S.P.		.750" S.P.	
			CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP
HZ24W	860	5404	4900	0.32	4135	0.34	2845	0.34	1235	0.43	-	-
HZ24T2	1140	7226	6305	0.69	5805	0.70	5155	0.72	3205	0.72	2080	0.85
HZ24Q1	1750	10996	7750	1.43	7525	1.46	7200	1.51	6480	1.61	5460	1.65
HZ24Q2	1750	10996	8635	1.87	8475	1.90	8150	1.94	7405	2.02	6290	2.04
HZ30W2	860	6754	7555	0.47	6610	0.51	5420	0.54	2320	0.57	-	-
HZ30W3	860	6754	9120	0.76	8085	0.78	6600	0.79	3215	0.80	1325	1.05
HZ30T2	1140	9032	11205	1.44	10535	1.50	9660	1.54	7770	1.60	6290	1.61
HZ30T3	1140	9032	12640	2.01	11970	2.06	10915	2.07	8650	2.07	6335	2.07
HZ36W1	860	8105	10945	0.73	9625	0.76	8070	0.77	3835	0.79	1345	0.77
HZ36W3	860	8105	14650	1.56	13380	1.58	11865	1.59	7175	1.62	3730	1.87
HZ36T2	1140	10839	15695	2.03	14680	2.11	13600	2.15	11265	2.18	8130	2.15
HZ36T3	1140	10839	18140	2.99	17195	3.04	16130	3.06	13850	3.07	10735	3.07
HZ42W1	860	9456	18130	1.92	16780	2.04	15620	2.14	12565	2.21	8675	2.18
HZ42W2	860	9456	21765	3.10	20535	3.16	19225	3.17	16150	3.25	11830	3.28
HZ42T1	1140	12645	23930	4.59	23275	4.76	22245	4.90	20535	5.18	18425	5.35
HZ48W1	860	10807	31350	5.22	29815	5.30	28195	5.30	24675	5.32	19925	5.43
HZ48W2	860	10807	35325	7.18	33650	7.29	31880	7.36	28135	7.48	23380	7.63
HZ48T2	1140	14451	38320	9.86	37310	9.97	36180	10.06	33935	10.25	31460	10.37
HZ54W1	860	12158	31265	5.18	31200	5.20	30585	5.21	27705	5.24	22695	5.26
HZ54W2	860	12158	41020	7.22	39260	7.31	37330	7.40	33120	7.42	27980	7.54
HZ54W3	860	12158	47035	10.49	45130	10.53	43205	10.60	39890	10.66	36325	10.75
HZ60W1	860	13509	37265	4.51	35235	4.66	33060	4.78	28505	4.91	23240	4.90
HZ60W2	860	13509	45630	7.50	43755	7.59	41675	7.69	36990	7.70	31465	7.70

Belt Drive

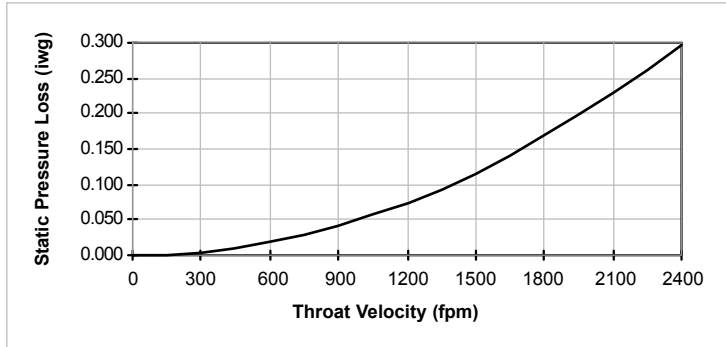
Model	RPM	Tip Speed FPM	Fan Capacity - CFM									
			0" S.P.		.125" S.P.		.250" S.P.		.500" S.P.		.750" S.P.	
			CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP
HZ24	999	6277	6015	0.50	5085	0.53	4295	0.53	2200	0.58	-	-
	1258	7904	7570	1.00	6690	1.04	6185	1.06	4360	1.05	3170	1.13
	1441	9054	8675	1.50	7795	1.56	7370	1.59	6320	1.60	4445	1.58
	1586	9965	9545	2.00	8665	2.07	8270	2.10	7460	2.14	5760	2.12
HZ30	753	5914	8400	0.50	6870	0.53	5040	0.53	-	-	-	-
	949	7453	10585	1.00	9200	1.06	7975	1.06	5095	1.07	1310	1.12
	1086	8529	12110	1.50	10775	1.58	9995	1.60	7320	1.60	4655	1.60
	1195	9386	13325	2.00	12010	2.10	11360	2.12	9025	2.13	6855	2.13
HZ36	1368	10744	15255	3.00	13945	3.14	13310	3.16	11790	3.19	9560	3.19
	774	7295	13595	1.00	11270	1.04	9475	1.04	3860	1.11	-	-
	886	8350	15565	1.50	13330	1.55	11865	1.56	7220	1.59	3240	1.80
	975	9189	17130	2.00	14925	2.07	13650	2.08	10415	2.09	5490	2.17
HZ42	1116	10518	19605	3.00	17405	3.09	16340	3.11	13890	3.12	10485	3.15
	1323	12469	23240	5.00	20955	5.11	20115	5.17	18200	5.20	16005	5.20
	569	6256	14955	1.02	12955	1.02	10385	1.03	-	-	-	-
	652	7169	17140	1.50	15435	1.53	13415	1.55	7715	1.58	-	-
HZ48	717	7884	18850	2.00	17310	2.03	15580	2.05	10975	2.08	-	-
	821	9027	21580	3.00	20260	3.04	18820	3.06	15320	3.10	10985	3.15
	973	10699	25575	4.99	24480	5.05	23300	5.08	20695	5.14	17495	5.16
	1114	12249	29285	7.49	28335	7.56	27325	7.61	25170	7.66	22710	7.73
HZ54	568	7138	20710	1.50	18300	1.52	15575	1.53	4210	1.57	-	-
	625	7854	22790	2.00	20610	2.03	18260	2.04	10810	2.06	-	-
	715	8985	26075	2.99	24185	3.03	22225	3.05	17185	3.06	7790	3.12
	848	10656	30925	4.99	29355	5.06	27700	5.07	24220	5.10	19350	5.12
HZ60	971	12202	35410	7.49	34050	7.58	32620	7.59	29700	7.66	26325	7.67
	559	7903	26675	1.99	23815	2.04	20415	2.06	9300	2.11	-	-
	640	9048	30540	2.99	28065	3.05	25330	3.07	18235	3.16	-	-
	759	10730	36215	4.99	34155	5.06	31980	5.12	26890	5.16	20085	5.28
HZ72	869	12285	41465	7.49	39680	7.58	37830	7.65	33695	7.69	28770	7.79
	957	13529	45665	10.01	44065	10.10	42370	10.18	38785	10.29	34640	10.32
	579	9095	34525	2.99	31335	3.04	27620	3.03	16455	2.94	-	-
	687	10791	40965	5.00	38350	5.04	35450	5.07	28170	4.97	15390	4.92
HZ72	786	12346	46870	7.48	44640	7.51	42135	7.60	36575	7.53	29950	7.38
	866	13603	51640	10.01	49640	10.03	47410	10.14	42590	10.14	36725	9.99
	991	15567	59095	15.00	57370	15.04	55490	15.09	51480	15.22	47005	15.13
	381	7182	47904	3.25	38163	2.92	-	-	-	-	-	-
HZ72	453	8539	56957	5.47	48799	4.94	39807	4.97	-	-	-	-
	519	9783	65255	8.22	58211	7.53	50851	7.40	-	-	-	-
	572	10782	71919	11.00	65613	10.18	58985	9.90	43678	10.29	-	-
	656	12365	82481	16.60	77114	15.52	71216	15.02	59034	15.06	-	-

See notes on page 8.

©PENNBARRY 2017

HS | HITESAVER (LOW PROFILE)

Belt Drive



Size	Throat Area (Sq. Ft.)
24	3.14
30	4.91
36	7.07
40	8.73
42	9.63
48	12.57
54	15.91
60	19.64

Model	RPM	Tip Speed FPM	Fan Capacity - CFM										Sones @ 1/8"
			0" S.P.		.125" S.P.		.250" S.P.		.375" S.P.		.500" S.P.		
			CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	
HS24	592	3720	4736	0.27	3847	0.27	2387	0.27	-	-	-	-	14.60
	637	4002	5095	0.33	4319	0.33	2843	0.32	2025	0.36	-	-	16.00
	733	4606	5864	0.50	5243	0.50	3959	0.48	3000	0.51	2311	0.55	19.20
	843	5297	6744	0.77	6203	0.77	5511	0.77	4169	0.74	3431	0.77	23.20
	904	5680	7232	0.95	6728	0.95	6141	0.95	4933	0.91	4054	0.93	24.20
HS30	658	5168	8050	0.64	6945	0.66	-	-	-	-	-	-	19.60
	756	5938	9249	0.96	8324	1.00	-	-	-	-	-	-	25.00
	811	6370	9922	1.19	9081	1.23	7910	1.21	-	-	-	-	28.00
	932	7320	11402	1.81	10692	1.86	9842	1.87	8179	1.72	-	-	37.00
	1027	8066	12564	2.42	11920	2.47	11185	2.50	10245	2.48	-	-	41.00
HS36	445	4194	10688	0.51	8596	0.56	-	-	-	-	-	-	13.60
	512	4825	12297	0.77	10508	0.83	-	-	-	-	-	-	15.80
	549	5174	13186	0.95	11524	1.02	9757	1.07	-	-	-	-	17.00
	631	5947	15155	1.44	13722	1.52	12206	1.58	-	-	-	-	19.60
	695	6550	16692	1.92	15395	2.01	14052	2.09	12672	2.16	-	-	22.00
HS42	403	4431	15531	0.98	13180	1.03	-	-	-	-	-	-	12.60
	463	5091	17843	1.48	15885	1.55	13585	1.61	-	-	-	-	16.50
	511	5619	19693	1.99	17944	2.06	15891	2.13	-	-	-	-	19.90
	586	6443	22584	3.00	21080	3.09	19376	3.16	17558	3.24	-	-	26.00
	696	7653	26823	5.03	25557	5.13	24240	5.23	22735	5.31	21202	5.40	35.00
HS48	316	3971	17495	0.77	13377	0.82	5086	0.86	-	-	-	-	12.10
	339	4260	18768	0.94	15093	1.02	8670	1.02	-	-	-	-	13.40
	390	4901	21592	1.44	18655	1.53	14211	1.53	6677	1.61	-	-	16.90
	430	5404	23807	1.93	21327	2.03	17621	2.08	12352	2.05	-	-	20.00
	493	6195	27295	2.91	25247	3.03	22313	3.12	18902	3.13	13871	3.10	25.00
	586	7364	32444	4.88	30734	5.03	28716	5.16	26059	5.25	23193	5.26	32.00
HS54	318	4496	24733	1.51	19580	1.61	-	-	-	-	-	-	21.00
	351	4962	27300	2.03	22668	2.16	13174	1.99	-	-	-	-	24.00
	402	5683	31266	3.05	27361	3.22	22864	3.25	-	-	-	-	29.00
	478	6758	37177	5.13	34095	5.36	30359	5.45	26426	5.46	15857	5.03	36.00
	548	7747	42622	7.73	39933	8.02	36827	8.18	33643	8.22	30060	8.21	43.00
	574	8115	44644	8.89	42076	9.20	39192	9.38	36116	9.44	32916	9.47	45.00
HS60	315	4948	29439	2.05	26331	2.09	19711	2.08	-	-	-	-	23.00
	361	5671	33738	3.09	31289	3.13	27304	3.17	19787	3.14	-	-	27.00
	429	6739	40093	5.18	38178	5.22	35404	5.28	31350	5.30	25004	5.26	34.00
	492	7728	45981	7.82	44368	7.84	42289	7.93	39580	7.99	35657	7.99	41.00
	542	8514	50654	10.45	49267	10.47	47550	10.57	45208	10.64	42647	10.70	47.00

Power rating BHP does not include transmission losses. Performance certified is for installation type A – Free inlet, Free outlet. Performance ratings do not include the effects of appurtenances. The sound ratings shown are loudness values in fan sones at 1.5 m (5 ft) in a hemispherical free field calculated per AMCA International Standard 301. Values shown are for: Installation Type A: free inlet hemispherical sone levels. Explosion proof motors and disconnects are available when specified.

©PENNBARRY 2017

ENGINEERING SPECIFICATIONS

Model

HC= Standard Height;
Cast Aluminum Propeller
HF = Standard Height;
Fabricated Steel Propeller;
AMCA Certified
HX= Standard Height;
Cast Aluminum Propeller
HS= HiteSaver; Cast Aluminum Propeller
HZ= HiteSaver; Fabricated Steel Propeller

Unit Size

24, 36, 48, 60, 30, 42, 54, 72

Drive Type

D = Direct Drive
B = Belt Drive

Motor Tap

See selection software.

Motor Speed

1 = Single Speed
2 = 2S2W 1800/1200
3 = 2S1W 1800/900

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

Frequency

5 = 50 Hz
6 = 60 Hz

Efficiency

S = Standard
P = Premium

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
00= Standard Gray
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

Roof Curb

See selection software.

Roof Pitch

0 = None
S = Single Slope
D = Double Slope

Metal Liner

0 = None
L = Metal Liner

Damper Holding Plate

0 = None
P = Damper Holding Plate

Neoprene Gasket

0 = None
G = Gasket

Wooden Nailer

0 = None
W = Wooden Nailer

Curb Paint/Coating

0 = None
B = Air Dried Epoxy
Q = Air Dried Enamel
X = Special

Thermal Overload Protection

0 = None
P = Thermal Protection

Disconnect Switch

0 = None
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

Firestat Switch

0 = None
F = Firestat Switch

AMCA Spark Rating

0 = None
C = Standard
B = Optional

Extended Lube Lines

0 = None
E = Lube Lines

Aluminum Housing

0 = None
H = Aluminum

Roof Pitch Adapters

0 = None
S = Single Slope
D = Double Slope

Remote Drive with Cover

0 = None
C = Remote

Belt / Bearing Cover

0 = None
B = Cover

Magnetic Damper Latch

0 = None
L = Latch

Inlet Guard

0 = None
G = Guard

Heat / Smoke Kit

0 = None
H = Heat / Smoke

Helper Spring

0 = None
H = Helper Spring

Torsion Spring

0 = None
T = Torsion Spring

ENGINEERING SPECIFICATIONS

HC - Direct Drive Units

Direct Drive Axial Upblast Roof exhaust fan shall be Hi-Ex HC, manufactured by PennBarry.

Units shall be weather resistant and designed to withstand prevailing wind velocities. A heavy gauge galvanized motor mounting panel shall be securely fastened to heavy gauge galvanized air shaft. Air shaft shall be welded to a heavy gauge galvanized base with welded corners, pre-punched mounting holes, and a deeply spun venturi. A ribbed reinforced galvanized windband shall be securely fastened to air shaft and shall include automatic butterfly dampers which open and close with the start and stop of the fan. No portion of fan shall protrude below the roof line.

Statically and dynamically balanced propellers shall be cast aluminum and airfoil shaped. Motors shall be continuous duty, ball bearing design, positively cooled, and furnished at the specified voltage and phase.

HC - Belt Drive Units

Belt Drive Axial Upblast Roof exhaust fan shall be Hi-Ex HC, manufactured by PennBarry.

Units shall be weather resistant and designed to withstand prevailing wind velocities. A heavy gauge galvanized motor mounting panel shall be securely fastened to heavy gauge galvanized air shaft. Air shaft shall be welded to a heavy gauge galvanized base with welded corners, pre-punched mounting holes, and a deeply spun venturi. A ribbed reinforced galvanized windband shall be securely fastened to air shaft and shall include automatic butterfly dampers which open and close with the start and stop of the fan. No portion of fan shall protrude below the roof line.

Statically and dynamically balanced propellers shall be cast aluminum and airfoil shaped. Motors shall be continuous duty, ball bearing design, positively cooled, and furnished at the specified voltage, phase, and enclosure. Shafts shall be turned, ground, polished, and rust protected. Pulleys shall be adjustable, cast iron, machined, keyed, securely attached, and sized for 150% of the horsepower at its rated maximum speed.

HX - Direct Drive Units

Direct Drive Axial Upblast Roof exhaust fan shall be Hi-Ex HX, manufactured by PennBarry.

Units shall be weather resistant and designed to withstand prevailing wind velocities. A heavy gauge galvanized motor mounting panel shall be securely fastened to heavy gauge galvanized air shaft. Air shaft shall be welded to a heavy gauge galvanized base with welded corners, pre-punched mounting holes, and a deeply spun venturi. A ribbed reinforced galvanized windband shall be securely fastened to air shaft and shall include automatic butterfly dampers which open and close with the start and stop of the fan. No portion of fan shall protrude below the roof line.

Statically and dynamically balanced propellers shall be cast aluminum and airfoil shaped. Motors shall be continuous duty, ball bearing design, positively cooled, and furnished at the specified voltage and phase.

HX - Belt Drive Units

Belt Drive Axial Upblast Roof exhaust fan shall be Hi-Ex HX, manufactured by PennBarry.

Units shall be weather resistant and designed to withstand prevailing wind velocities. A heavy gauge galvanized motor mounting panel shall be securely fastened to heavy gauge galvanized air shaft. Air shaft shall be welded to a heavy gauge galvanized base with welded corners, pre-punched mounting holes, and a deeply spun venturi. A ribbed reinforced galvanized windband shall be securely fastened to air shaft and shall include automatic butterfly dampers which open and close with the start and stop of the fan. No portion of fan shall protrude below the roof line.

Statically and dynamically balanced propellers shall be cast aluminum and airfoil shaped. Motors shall be continuous duty, ball bearing design, positively cooled, and furnished at the specified voltage, phase, and enclosure. Shafts shall be turned, ground, polished, and rust protected. Pulleys shall be adjustable, cast iron, machined, keyed, securely attached, and sized for 150% of the horsepower at its rated maximum speed.

PennBarry Product Solutions

COMMERCIAL

Roof & Wall Exhaust Centrifugal Fans
Ceiling, Wall, & Inline Centrifugal Fans
Roof Supply Centrifugal Fans
Square & Round Centrifugal Fans
Wall Mounted Axial Fans
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

ENERGY RECOVERY

Outdoor Units
Indoor Units

KITCHEN VENTILATION

Kitchen Hoods
Make-Up Air Units
Exhaust Fans



PENN BARRY™

Moving Your Way

PennBarry is proud to be your preferred manufacturer of commercial and industrial fans and blowers. Learn how PennBarry can assist you in your next application by contacting your PennBarry Representative or visiting us on the web at www.pennbarry.com.

PennBarry | www.pennbarry.com | pennbarrysales@pennbarry.com | tel: 972.212.4700 | fax: 972.212.4702

PennBarry reserves the right to make changes at any time, without notice, to models, construction, specifications, options, availability, etc. This bulletin illustrates the appearance of PennBarry products at the time of publication. View the latest updates on the PennBarry website.

© Copyright 2017 PennBarry. All Rights Reserved. HI-EX FEBRUARY 2017