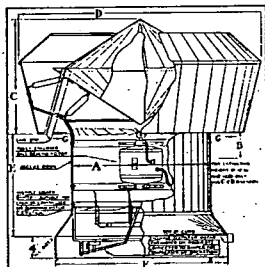


Hirschman's S E and F Roof Ventilators

For our Effico Ventilator see preceding pages



F Electric Ventilator Non-Automatic (Patented)

Motor—Condenser Motor, Brushless, Commutatorless, Variable Speed, fully enclosed, very quiet running, are furnished at extra cost when above characteristics are essential.

DIMENSIONS OF HIRSCHMAN F, SE AND LU VENTILATORS

Vents S E Weight Crated	Dimensions, In. (See Diagram)							Thickness of Metal			
	A	B	C	D	E	F	H	Ga. Galvan.		Oz. Copper	
								Head	Base	Head	Base
30	12	6	10	22	24	16	12	24	24	16	16
50	18	6	16	32	24	24	12	24	24	16	16
75	24	8	21	42	30	30	12	24	24	16	16
110	30	8	27	52	30	36	18	22	20	18	20
150	36	10	33	62	30	42	18	22	18	20	24
200	42	10	38	71	30	48	18	20	18	20	24
300	48	12	42	81	36	54	18	18	18	20	24
360	54	12	46	91	36	60	24	18	18	20	24
420	60	12	60	102	36	66	24	18	16	24	24
490	66	16	66	102	36	72	24	18	16	24	32
520	72	16	70	120	36	78	24	18	16	24	32
600	84	16	76	120	36	92	24	18	16	24	32

For utilizing heads only use "C" and "B" dimensions.

CAPACITIES OF HIRSCHMAN F VENTILATOR

Size of Stack, In.	Speed R.p.m.	Cu. Ft. Min. Less Than 1/8 in. Sp.	Cu. Ft. Min. 1/8 in. Sp.	Cu. Ft. Min. 1/4 in. Sp.	Type of Motor	H.P.	Tele-graph Code
12	1425	650			T.D.	1/30	Range
	1750	900			S.R.	1/25	Ram
18	1140	1600			S.R.D.	1/25	Rone
	855	1675	900		S.D.R.	1/8	Rank
	1140	2000	1350		S.D.R.	1/6	Rap
	1420	2200	1600	1200	T.Q.	1/6	Raze
24	780	2600	1700	900	S.T.D.Q.	1/6	Ray
	850	3400	2600	1400	D.S.R.	1/4	Rat
30	1140	4500	3700	3200	S.D.R.	1/2	Rugn
	680	4500	3600	2700	D.Q.	1/4	Rein
36	900	6000	5000	3600	S.R.T.	1/2	Rinse
	550	6500	5200	3900	S.R.	1/2	Rime
42	900	7000	6000	5000	T.Q.D.	1/2	Rip
	575	11000	8000	6500	S.T.Q.R.D.	3/4	Roar
	490	10000	7000	5000	S.T.R.Q.D.	1	Roast

Prefix letters in motor column indicate kind of current for which the motors are available.

Alternating—S, single-phase, 60 cycle. R, two or three-phase, 60 cycle. T, single-phase, 25 cycle. Q, two or three-phase, 25 cycle. D, direct current.

The low capacities are suitable for schools, theatres, auditoriums and other quiet running requirements.

REMEMBER—With the Hirschman F Ventilator you still have a good ventilator when the motor is not running.

Recommendation of F Electric Ventilator—Is a high class ventilator where a high exhaust velocity is required at certain periodical times or resistance (static pressure) is encountered. Where our Effico Rotary Head, or the Effico Wind-Electric Automatic Ventilator, due to obstructed location or its moderate, even capacity is not required, then we recommend the Hirschman F Ventilator.

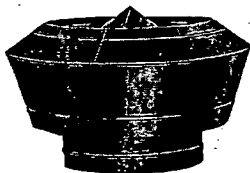
Dampers—Chain, pneumatic or electrically operating; close fitting damper supplied with all sizes if required. Fire Damper—with fusing link furnished if required. There are no outside louvers to freeze or blow shut.

As an Exhaust Head

FOR EXHAUST FAN

SE Ventilator design is such that air driven 1200 ft. velocity through the head, registers only .015 water gauge static pressure a performance of unequalled merit. Thus for a fan or high heat exhaust head, it is highly effective. When so used and the fan is cut off the ventilator still ventilates as a syphon ventilator. There are no shutters to blow or freeze shut.

Is also vision-proof, will resist back drafting during a five mile wind against an adverse temperature difference of 10 deg. Fahr. Also during the same wind velocity will not back-draft unless a greater than static pressure resistance of .025 water gauge. For information on wind pressure causing down draft in the angle of U or L buildings, write us.



SE Ventilator

The head of the "F" Electric Ventilator sold separately makes an excellent Syphon Ventilator.

The Swartwout Company

Swartwout Rotary Ball Bearing Ventilators

18551 Euclid Avenue

Cleveland, Ohio

Branch Offices:

New York, N.Y., 103 Park Ave.
Pittsburgh, Pa., Grant Bldg.
Chicago, Ill., 549 W. Randolph St.
St. Louis, Mo., 1124 Chemical Bldg.
Atlanta, Ga., Wm. Oliver Bldg.

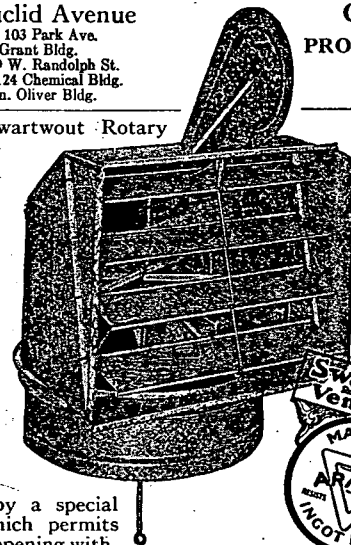
PRODUCTS—

Swartwout Rotary Ball Bearing Ventilators.

Construction—Swartwout Rotary

Ball Bearing Ventilators are built of Armco Ingot Iron or special metals as required. All joints are double seamed—no bolts being used. All interior members are given a special rust-resisting coating after punching and forming.

Bronze bearings revolving on bronze balls provide free rotation without the necessity of lubrication. Outside louver dampers are controlled easily from within the building by a special louver attachment which permits definite setting of area opening without necessity of fastening the chain. Bases to fit standard sizes are made of the same metal, two gauges heavier than the ventilator.



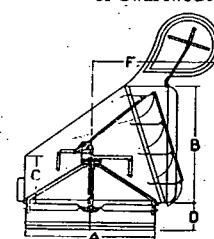
Erection and Operation—Swartwout Rotary Ball Bearing Ventilators leave the factory completely assembled.

Swinging freely with the wind, Swartwout Ventilators provide a continual suction of air from within the building.

Survey Service—THE SWARTWOUT COMPANY cooperates with heating and ventilating engineers by making helpful recommendations in the form of Swartwout Surveys. There is no charge for this service.

Write for a copy of "The Gospel of Fresh Air," a new book on ventilation.

Dimensions, Weights and Gauges of Swartwout Ventilators



For dimensions, "A" "B," "C," "D," "E," "F," in inches see table below.

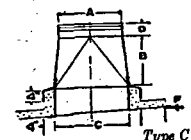
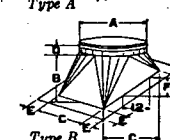
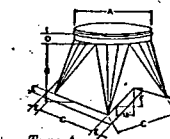
In ordering only dimension "A" is required.

Installation

To insure proper installation and immediate satisfaction, complete directions for mounting are supplied on each ventilator.

A	B	C	D	F	Gauge Iron	Wt. Copper, Oz.	Net Wt., Lb.	Crated Wt., Lb.
10	9 1/8	4	5	11 1/2	24	18	15	20
12	11	4 3/4	5 1/2	14 1/4	24	18	20	25
14	12 1/8	5 1/4	6 1/2	15 1/2	24	18	30	30
16	14 1/4	6 3/8	7 1/2	17	24	18	35	40
18	16 1/2	6 3/4	8 1/2	19	24	18	45	55
20	18 1/2	7 1/8	9 1/2	21	24	18	50	65
24	22	9	11 1/4	24 1/2	24	20	60	80
30	27 1/2	11 1/8	13 1/4	30	22	24	120	175
36	33	13 1/2	15 1/4	34 1/2	22	24	160	240
42	38 1/2	15 1/4	17 1/4	41 1/4	20	28	225	390
48	44	18 1/8	20 1/4	46 1/2	20	28	320	465
54	49 1/2	20 1/4	22 1/4	47	20	28	485	690
60	55	22 1/2	24 1/2	51 1/2	20	28	560	750
66	60 1/2	24 1/4	26 1/4	56 1/2	20	28	650	825
72	66	27	29 1/4	62 1/2	20	28	780	1000

Dimensions, Weights and Gauges of Swartwout Bases



A	B	C	D	E	F	Gauge Iron	Wt. Copper, Oz.	Aver. Net Wt., Lb.	Aver. Crated Wt., Lb.
10	18	14	5	5	22	24	24	13	15
12	18	16	5	5	22	24	24	18	20
14	18	18	5	5	22	24	24	26	28
16	18	20	5	5	22	24	24	35	37
18	18	22	5	5	22	24	24	38	40
20	22	24	5	5	22	24	24	45	50
24	22	28	5	5	22	24	24	55	65
30	22	34	5	5	20	28	28	80	95
36	22	40	5	5	20	28	28	95	110
42	22	46	5	5	18	32	105	125	125
48	22	52	5	5	18	32	115	135	135
54	22	58	5	5	18	32	125	150	150
60	22	64	5	5	18	32	140	165	165
66	22	70	5	5	18	32	155	185	185
72	22	76	5	5	18	32	170	200	200