MASON INDUSTRIES, Inc.
Manufacturers of Vibration Control Products

350 Rabro Drive
Hauppauge, NY 11788
631/348-0282
FAX 631/348-0279
Info@Mason-Ind.com
www.Mason-Ind.com

2101 W. Crescent Ave., Suite D
Anaheim, CA 92801
714/535-2727
FAX 714/535-5738
Info@MasonAnaheim.com
www.MasonAnaheim.com

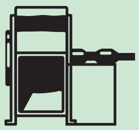
FAN AND MOTOR TECHNICAL INFORMATION AND WEIGHTS OF KSL BASES FOR FANS AND MOTORS

KSL BASE WEIGHTS

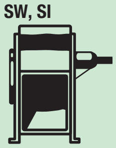
DATA SHEET DS-803

STANDARD ARRAGEMENTS

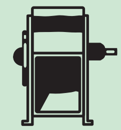
ARRANGEMENT NO. 1, SW, SI
For belt drive or direct connection. Wheel overhung. Two bearings on base.



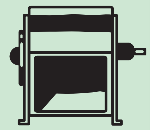
ARRANGEMENT NO. 2, SW, SI
For belt drive or direct connection. Wheel overhung. Bearings in bracket supported by fan housing.

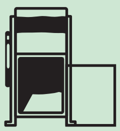


ARRANGEMENT NO. 3, SW, SI
For belt drive or direct connection. One bearing on each side and supported by fan housing. Not recommended in sizes 27" diameter wheel and smaller.

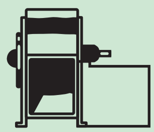


ARRANGEMENT NO. 3, DW, DI
For belt drive or direct connection. One bearing on each side and supported by fan housing.

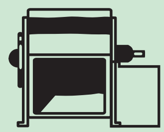




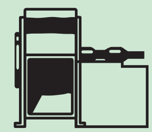
ARRANGEMENT NO. 4, SW, SI
For direct drive. Wheel overhung on prime mover shaft. No bearing on fan. Base or equivalent for prime mover.



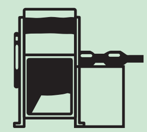
ARRANGEMENT NO. 7, SW, SI
For belt drive or direct connection. Arrangement No. 3 plus base for prime mover. Not recommended in sizes 27" diameter and smaller.



ARRANGEMENT NO. 7, DW, DI
For belt drive or direct connection. Arrangement No. 3 plus base for prime mover.



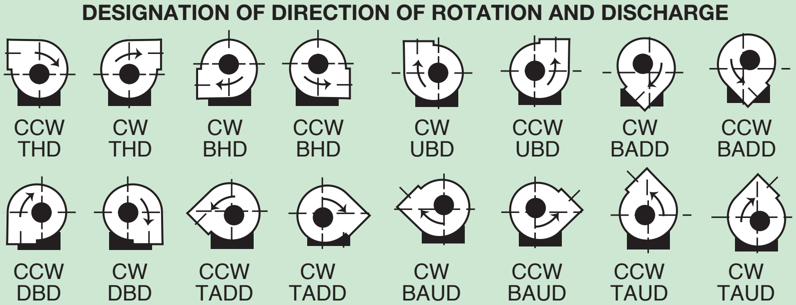
ARRANGEMENT NO. 8, SW, SI
For belt drive or direct connection. Arrangement No. 1 plus base for prime mover.



ARRANGEMENT NO. 9, SW, SI
For belt drive or direct connection. Arrangement No. 1 designed for mounting prime mover on side of base.

WHEEL DIAM.	CLASS I BLOWER WEIGHTS (lbs.)						CLASS II BLOWER WEIGHTS (lbs.)						CLASS III BLOWER WEIGHTS (lbs.)					
	Single Inlet				Double Inlet		Single Inlet				Double Inlet		Single Inlet				Double Inlet	
	ARR. 1,7&9	ARR. 2&4	ARR. 3	ARR. 8	ARR. 3	ARR. 7	ARR. 1,7&9	ARR. 2&4	ARR. 3	ARR. 8	ARR. 3	ARR. 7	ARR. 1,7&9	ARR. 2&4	ARR. 3	ARR. 8	ARR. 3	ARR. 7
12 1/4	215	170	–	270	–	–	245	180	–	310	–	–	350	255	–	445	–	–
13 1/2	240	200	–	295	–	–	275	210	–	340	–	–	390	305	–	485	–	–
15	285	240	–	340	–	–	325	250	–	390	–	–	460	365	–	560	–	–
16 1/2	345	285	–	410	–	–	395	315	–	470	–	–	550	450	–	680	–	–
18 1/4	420	350	–	500	390	–	480	385	–	575	450	–	660	545	–	825	640	–
20	510	425	–	620	455	–	585	475	–	715	525	–	820	670	–	1020	735	–
22 1/4	600	510	–	740	545	–	690	565	–	850	625	–	970	810	–	1220	900	–
24 1/2	715	605	–	890	680	–	820	670	–	1030	780	–	1150	960	–	1470	1120	–
27	850	710	–	1030	870	–	975	800	–	1185	1000	–	1360	1150	–	1700	1440	–
30	1030	840	750	1230	1105	1400	1180	970	865	1420	1270	1610	1650	1390	1240	2030	1820	2316
33	1230	1030	900	1470	1370	1700	1410	1185	1045	1690	1575	1960	1980	1700	1490	2430	2260	2800
36 1/2	1450	1240	1150	1740	1700	2100	1650	1430	1320	2000	1960	2420	2350	2050	1900	2886	2800	3960
40 1/4	1755	–	1400	2050	2100	2500	1980	–	1610	2350	2420	2880	2850	–	2310	3400	3460	4120
44 1/2	2150	–	1650	2450	2600	3200	2470	–	1900	2820	2990	3680	3550	–	2720	4050	4280	5280
49	2700	–	2100	3100	3400	4000	3040	–	2420	3560	3900	4600	4256	–	3460	5120	5600	6600
54 1/4	3320	–	2700	3950	4400	5100	3800	–	3110	4450	5050	5850	5450	–	4450	6550	7250	8400
60	4100	–	3400	4950	5700	6500	4700	–	3920	5700	6550	7470	6900	–	5600	8200	9400	10700
66	5500	–	4100	6230	7300	8400	6100	–	4720	7160	8500	9650	8600	–	6750	10300	12000	13900
73	7000	–	5100	7825	9100	10800	7850	–	5870	9006	10500	12450	10400	–	8400	12900	15000	17800
80 3/4	9000	–	6500	–	11800	13950	10350	–	7480	–	13600	16000	–	–	10700	–	19500	23000
89	11750	–	8500	–	15600	18100	13500	–	9800	–	18000	20800	–	–	14000	–	25800	30000
98	14900	–	11250	–	20400	23600	17150	–	12900	–	24500	27200	–	–	18600	–	33700	39000
108 3/4	18700	–	14750	–	26300	30000	21500	–	17000	–	30300	34500	–	–	24400	–	43500	49500

DESIGNATION OF DIRECTION OF ROTATION AND DISCHARGE



CCW THD, CW THD, CW BHD, CCW BHD, CW UBD, CCW UBD, CW BADD, CCW BADD

CCW DBD, CW DBD, CCW TADD, CW TADD, CW BAUD, CCW BAUD, CCW TAUD, CW TAUD

TABLE OF OPERATING LIMITS

Class	Maximum Pressure Water Gauge
I	3 3/4 inches
II	6 3/4 inches
III	12 1/4 inches

Fan class is a service designation based on maximum discharge pressure limits. As the class number increases the construction of the fan becomes heavier.

Direction of rotation is determined from side opposite the inlet. The discharge of the fan is determined by the direction of the line of air discharge and its relation to the fan shaft. All intermediate discharges are shown as angular discharges. The angle of discharge is measured from the horizontal centerline.

CW-Clockwise
CCW-Counter-Clockwise
THD-Top Horizontal
BHD-Bottom Horizontal
UBD-Up Blast
DBD-Down Blast
TAUD-Top Angular Up
TADD-Top Angular Down
BAUD-Bottom Angular Up
BADD-Bottom Angular Down

OPEN MOTORS – NET WEIGHTS (lbs.)

Frames	RPM	HP	1/2	3/4	1	1-1/2	2	3	5	7-1/2	10	15	20	25	30	40	50	60	75	100	125	150	200
"T" FRAMES	1800 RPM	Frame	–	–	143T	145T	145T	182T	184T	213T	215T	254T	256T	284T	286T	324T	326T	364T	365T	404T	405T	444T	445T
		Weight	–	–	35	45	45	75	85	100	110	202	212	310	350	450	500	600	680	800	900	1250	1370
	1200 RPM	Frame	–	143T	145T	182T	184T	213T	215T	254T	256T	284T	286T	324T	326T	364T	365T	404T	405T	444T	445T	–	–
		Weight	–	35	45	75	85	100	110	202	212	310	350	450	500	600	680	800	900	1250	1370	–	–
"U" FRAMES	1800 RPM	Frame	56	56	182	184	184	213	215	254U	256U	284U	286U	324U	326U	364U	365U	404U	405U	444U	445U	585	586
		Weight	37	37	55	65	65	95	110	180	210	285	325	420	470	550	610	780	865	975	1150	2275	2500
	1200 RPM	Frame	56	182	184	184	213	254U	256U	256U	284U	324U	326U	364U	365U	404U	405U	444U	445U	584	585	586	683
		Weight	37	55	65	65	95	180	210	210	285	420	470	550	610	780	865	975	1150	1300	2275	2500	2800

KSL CONCRETE BLOCK WEIGHTS (lbs.) MOTOR POSITIONS X & Y

WHEEL DIAM.	SINGLE WIDTH FANS					DOUBLE WIDTH AND ARR. 1 FANS				
	APPROX. BASE SIZE	BASE DEPTH				APPROX. BASE SIZE	BASE DEPTH			
		6"	8"	10"	12"		6"	8"	10"	12"
12 1/4 & 13 1/2	4.0 x 5.5	1650	2200	2750	3300	5.0 x 4.5	1690	2250	2815	3380
15 - 18 1/4	4.5 x 5.0	1690	2250	2815	3380	5.5 x 5.0	2060	2750	3435	4120
20 & 22 1/4	5.5 x 5.5	2260	3020	3770	4520	6.5 x 5.5	2680	3580	4470	5360
24 1/2 & 27	5.5 x 6.0	2480	3300	4130	4960	6.5 x 6.0	2920	3900	4870	5840
30 & 33	6.0 x 7.0	3150	4200	5250	6300	7.5 x 7.0	3940	5250	6565	7880
36 1/2 - 40 1/4	7.0 x 7.5	3940	5250	6565	7800	9.0 x 7.5	5060	6750	8435	10120
44 1/2 & 49	8.0 x 9.5	5700	7600	9500	11400	10.5 x 9.5	7500	10000	12500	15000
54 1/2 & 60	9.0 x 10.0	6750	9000	11250	13500	12.0 x 10.0	9000	12000	15000	18000
66 & 73	10.5 x 11.0	8660	11550	14435	17320	14.0 x 11.0	11550	15400	19250	23100
80 3/4	11.5 x 12.0	–	13800	17250	20700	15.5 x 12.0	–	18600	23250	27900
89	12.5 x 13.5	–	–	21150	25400	16.5 x 13.5	–	–	27850	33400
98 1/4	13.5 x 13.5	–	–	–	27400	18.5 x 13.5	–	–	–	37500
108 3/4	14.5 x 14.5	–	–	–	31600	20.0 x 14.5	–	–	–	43600

KSL CONCRETE BLOCK WEIGHTS (lbs.) MOTOR POSITIONS W & Z

WHEEL DIAM.	SINGLE WIDTH FANS					DOUBLE WIDTH AND ARR. 1 FANS				
	APPROX. BASE SIZE	BASE DEPTH				APPROX. BASE SIZE	BASE DEPTH			
		6"	8"	10"	12"		6"	8"	10"	12"
12 1/4 & 13 1/2	3.0 x 4.5	915	1350	1590	1825	4.0 x 4.5	1350	1800	2250	2700
15 - 18 1/4	3.5 x 5.0	1310	1750	2240	2620	4.5 x 5.0	1690	2250	2815	3380
20 & 22 1/4	4.0 x 5.5	1650	2200	2750	3300	5.0 x 5.5	2060	2750	3435	4120
24 1/2 & 27	4.0 x 6.0	1800	2400	3000	3600	5.0 x 6.0	2250	3000	3750	4500
30 & 33	4.5 x 7.0	2360	3150	3940	4720	6.0 x 7.0	3150	4200	5250	6300
36 1/2 - 40 1/4	5.0 x 7.5	2850	3750	4680	5700	7.0 x 7.5	3940	5260	6565	7880
44 1/2 & 49	5.5 x 9.5	3920	5225	6540	7840	8.0 x 9.5	5700	7600	9500	11440
54 1/2 & 60	6.0 x 10.0	4500	6000	7500	9000	9.0 x 10.0	6750	9000	11250	13500
66 & 73	7.0 x 11.5	6040	8050	10800	12080	11.0 x 11.5	9500	12650	15800	19000
80 3/4	8.0 x 12.5	–	10000	12500	15000	12.0 x 12.5	–	15000	18750	22500
89	9.0 x 14.5	–	–	16300	19600	14.5 x 14.5	–	–	23600	28240
98 1/4	9.5 x 14.5	–	–	–	20600	14.5 x 14.5	–	–	–	31500
108 3/4	10.5 x 15.5	–	–	–	24440	16.0 x 15.5	–	–	–	37200

Base depths shown in shaded areas conform to the requirements set in the MASON specification for KSL BASES. When Estimating jobs with other concrete block specifications refer to example for typical pricing method.

Example: KSL concrete base to be 2 times total equipment wt. Spring deflection 2 1/2".
Fan: 49" Wheel dia., Class III, Arr. 3, DWDI — Fan Wt.: 5600 lbs. (from Fan Wt. Chart on front side)
Motor: 60 HP, Frame 364T, 1800 RPM, Motor Pos. Y. — Motor Wt.: 600 lbs. (from Motor Wt. Chart on top of page)

Minimum block wt. 6200 lbs. times 2 = 12,400 lbs. From KSL Concrete Block Wt. Chart (above) use 10" depth.
From Price List B-80 for Type KSL Bases (10") List Price $2560.00