

Meidinger Blower

Meidinger high speed blowers with cast iron housings, 3360 R.P.M. sleeve bearing motors, and built in intake sound silencer. The following sizes are normally stocked. Other sizes are available by special order (sleeve or ball bearing).



Meidinger Blower Specifications

Blower No.	Width	Height	Depth (including motor)	Outlet ID	Capacity c.f.m.	Pressure in inches	Horsepower
804	20	21-5/8	20-5/8	5-1/2	400	3-1/4	.5
1004	19-5/8	21-5/8	19-3/4	5-1/2	500	4	.7
1404	19-5/8	21-5/8	20-1/8	5-1/2	500	5-1/2	.9
1605	20	22-1/2	20-3/8	6-1/4	600	6	1.1

MFO: Single phase, 120 or 220-240 volts
DFO: Three phase, 208-240 volts

Meidinger Blower Capacity

Blower No.	Inches of Water													
	2	2.5	3	3.25	4	4.75	5	5.5	6	6.5	7	7.5	8	8.5
	C.F.M													
804	450	430	410	400	330	250	200	90	0					
1004	630	615	570	515	500	385	335	200	0					
1404	660	640	630	615	580	550	530	500	430	350	275	185	0	
1605	800	785	770	760	725	680	665	630	600	550	510	475	250	0

Meidinger Blower (Continued)

NOTE: For larger air requirements, please inquire into the Meidinger slow speed blower line. These have the same qualifications as the high speed blowers except they are usually installed in a remote area as a central blower for the organ. These have sheet metal housings with 1680 R.P.M. ball bearing motors and a built-in intake sound silencer. When ordering, be certain to specify outlet direction. Larger sizes are available up to 100 h.p.

Blower No.	Capacity C.F.M.	Pressure in inches	Horsepower
120-1	200	4-3/4	.45
120-2	275	4-3/4	.55
120-3	350	4-3/4	.8
120-4	450	4-3/4	.9
120-5	600	4-3/4	1.1
120-6	800	4-3/4	1.3
120-7	1000	4-3/4	1.6
120-8	1250	4-3/4	2.1
120-9	1600	4-3/4	2.6
120-10	1900	4-3/4	3.1
140-1	230	5-1/2	.6
140-2	280	5-1/2	.7
140-3	400	5-1/2	.8
140-4	550	5-1/2	.9
140-5	650	5-1/2	1.3
140-6	850	5-1/2	1.6
140-7	1050	5-1/2	2.1
140-8	1450	5-1/2	2.6
140-9	1700	5-1/2	3.1
140-10	2000	5-1/2	3.6
160-1	230	6	.7
160-2	290	6	.75
160-3	425	6	1.1
160-4	580	6	1.2
160-5	700	6	1.6
160-6	900	6	2.1
160-7	1150	6	2.6
160-8	1500	6	3.1
160-9	1750	6	3.3
160-10	2050	6	3.6

Delivery on all the above blowers is 14-18 weeks.

Instructions and Engineering Data for Meidinger Blowers

Oiling

The oil cups are fitted with wool yarn wicks. Before starting, fill both cups with a lightweight electric motor oil. The wick will absorb the oil, so repeat this several times.

Frequency of oiling depends on how much the organ is used. To be on the safe side, re-oil every service call.

No attention need be given towards lubricating the ball bearing blowers

Direction of Rotation

The blower will produce air in either direction, but rotation in the wrong direction will result in overloading, reduced capacity and eventually will cause the windings to burn out. Immediately after wiring, make sure that the rotor is rotating in the direction of the arrow.

Motor and Temperature

Be certain that the fuse rating is no greater than shown on the blower. Also, a slo-blo fuse is recommended. Although the motor winding temperature will stand 120°C (248°F), the motor housing temperature should not exceed 65°C (149°F). It is normal for the motor to reach its full speed within 15 seconds. If full speed has not been reached within 30 seconds, turn the power off. Connect a voltmeter to the motor box and reapply power. Upon starting, the voltage should not drop more than 10% of the line voltage.

Dynamic/Static Ratio

The static pressure will be approximately 1" to 2" above the dynamic pressure. There will naturally be a larger difference between the static pressure and the regulated pressure.

High Elevation Operation

At higher elevations, the C.F.M. will remain the same. The motor will operate cooler, but the pressure will drop 4% per 1,000 feet. (i.e.: The pressure drop in Denver at 5,000 feet will be 20%.)

Meidinger Blower (Continued)

Method of Figuring Wind (C.F.M.) Required for Organs

Unit Organ: Rank of 61 pipes count as 1 stop. (One)
 Rank of 73 pipes count as 2 1/2 stops. (Two and a half)
 Rank of 85 pipes count as 3 1/4 stops. (Three and a quarter)
 Rank of 97 pipes count as 3 3/4 stops. (Three and three quarters)

Straight Organ: Rank of 16' pitch count as 1 1/2 stops. (One and a half)
 Rank of 8' pitch count as 1 stop. (One)
 Rank of 4' pitch count as 3/4 stop. (Three quarters)
 Rank of 2' pitch count as 1/2 stop. (One half)

Sub-Coupler counts as two thirds of the total value in stops of the rank on which it works.

Super-Coupler counts as one third of the total value in stops of the rank on which it works.

Wind Required: After figuring the value, in stops, of the rank of pipes, the total c.f.m. required by the organ is found as follows:

Tracker Action Multiply number of stops by 25
Pneumatic Action Multiply number of stops by 30
Electric Action Multiply number of stops by 25

Example

Straight Organ:	Swell 10 Ranks Great 10 Ranks Pedal 2 Ranks	Swell, Sub and Super-Couplers (playable in full organ), usual Inter-manual Couplers. Pneumatic Action.	
	Swell:	1 x 16' counting as 1 1/2 stops 5 x 8' counting as 5 stops 2 x 4' counting as 1 1/2 stops 2 x 2' counting as 1 stop	9 stops
	Great:	10 x 8' counting as 10 stops	10 stops
	Pedal:	2 x 16' counting as 3 stops	3 stops
	Swell:	Sub-Coupler counting as 6 stops Super-Coupler counting as 3 stops	6 stops 3 stops
		Total:	31 stops

Add one additional stop for each air operated tremolo used.

Wind required — 31 x 30 — 930 c.f.m. (For Tracker Action the wind required would be 31 x 25 = 775 c.f.m.)

IMPORTANT: Due allowance should be made for excessive wind leakage, sprung reservoir, small windways and large scaling.