

SWSI BC/BAF Torque Requirements (in-lb)

FAN SIZE	NESTED INLET VANES				EXTERNAL INLET VANES			
	CL 1	CL 2	CL 3	CL 4	CL 1	CL2	CL 3	CL 4
122	N/A	N/A	N/A	N/A	100	100	100	100
135	N/A	N/A	N/A	N/A	100	100	100	110
150	N/A	N/A	N/A	N/A	100	100	100	140
165	100	100	100	130	100	100	130	170
182	100	100	120	160	100	100	150	210
200	100	100	140	190	100	110	180	250
222	100	110	180	240	100	140	230	300
245	100	130	210	290	100	170	280	370
270	100	160	260	350	130	210	340	450
300	120	200	320	430	160	260	410	550
330	150	240	390	520	190	310	500	670
365	180	300	480	640	230	380	610	820
402	220	360	580	770	280	460	750	1000
445	260	440	710	950	340	570	910	1220
490	320	530	860	1150	410	690	1110	1480
542	390	650	1050	1400	510	840	1780	2380
600	480	800	1280	1720	820	1360	2180	2920
660	580	970	1550	2080	990	1640	2640	3530
730	710	1190	2290	3060	1210	2010	3230	4320
807	1050	1750	2800	3750	N/A	N/A	N/A	N/A
890	1280	2120	3410	4550	N/A	N/A	N/A	N/A
982	1550	2590	4150	5550	N/A	N/A	N/A	N/A

DWDI BC/BAF Torque Requirements (in-lb)

FAN SIZE	NESTED INLET VANES			
	CL 1	CL 2	CL 3	CL 4
165	100	120	200	260
182	100	140	240	320
200	100	180	280	380
222	140	220	360	480
245	160	260	420	580
270	200	320	520	700
300	240	400	640	860
330	300	480	780	1040
365	360	600	960	1280
402	440	720	1160	1540
445	520	880	1420	1900
490	640	1060	1720	2300
542	780	1300	2100	2800
600	960	1600	2560	3440
660	1160	1940	3100	4160
730	1420	2380	4580	6120
807	2100	3500	5600	7500
890	2560	4240	6820	9100
982	3100	5180	8300	—

BCS Torque Requirements (in-lb)

FAN SIZE	NESTED INLET VANES			EXTERNAL INLET VANES		
	CL 17	CL 23	CL 26	CL 17	CL 23	CL 26
270	310	520	730	400	670	940
300	380	640	900	500	830	1160
330	460	780	1090	600	1000	1400
365	570	950	1330	730	1230	1720
402	690	1160	1620	890	1490	2740
445	840	1420	1980	1090	2400	3350
490	1020	1720	2400	1320	2910	4070
542	1260	2100	3540	2130	3570	4990
600	1540	3100	4330	2610	4370	6100
660	1860	3750	5240	3150	5280	7380
730	2740	4590	6410	3860	6460	9030
807	3350	5610	7840	N/A	N/A	N/A
890	4070	6820	9530	N/A	N/A	N/A
982	4960	8310	—	N/A	N/A	N/A

NOTES:

- Standard length of the handle supplied by Twin City Fan & Blower is 10". The force required to operate inlet vane is:

$$\frac{\text{Torque in In-Lb}}{\text{Length of Lever}}$$
- For sizing actuator, multiply above torque by 1.2 for rotary and 1.5 for linear actuators.

RTF/HIB Torque Requirements (in-lb)

FAN SIZE	NESTED INLET VANES		EXTERNAL INLET VANES	
	CL 18/20	CL 23/24	CL 18/20	CL 23/24
180	N/A	N/A	190	310
200	N/A	N/A	230	370
220	N/A	N/A	280	460
240	N/A	N/A	340	550
270	390	640	410	670
300	480	780	500	820
330	580	950	610	1000
360	710	1170	750	1230
400	870	1430	920	1490
450	1060	1740	1120	1820
490	1290	2120	1360	2920
540	1580	2590	1670	3570
600	1930	3830	2690	4370
660	2810	4630	3250	5290
730	3430	5650	3970	6460
800	4200	6920	4860	7910

Industrial Torque Requirements (in-lb)

FAN SIZE	EXTERNAL INLET VANES		
	CL 18/20	CL 23/24	CL 18/20
913	120	170	240
915	170	230	330
917	210	290	420
919	260	360	520
921	320	440	630
923	390	530	760
926	490	680	970
929	620	850	1220
933	800	1100	1580
937	1000	1380	1970
941	1230	1690	3180
945	1480	2680	3840
949	2320	3180	4560
954	2800	3840	5510
960	3470	4750	6810

NOTES:

- Standard length of the handle supplied by Twin City Fan & Blower is 10". The force required to operate inlet vane is:

$$\frac{\text{Torque in In-Lb}}{\text{Length of Lever}}$$
- For sizing actuator, multiply above torque by 1.2 for rotary and 1.5 for linear actuators.



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