

M-D Pneumatics[™] **COMPETITOR SL**[™]

Rotary Positive Blowers

Designed with features found ordinarily on high-end blowers, **COMPETITOR SL** blowers are still designed to be interchangeable, with respect to foot print, shaft height and diameter, with equivalent sizes of Roots Universal RAI/RAI-J[®], and many Sutorbilt[®] California Series Legend[™] Series L and P, as well as M-D Pneumatics COMPETITOR PLUS[™] blowers.

Splash Oil Lubrication at Both Ends

COMPETITOR SL blowers include splash oil lubrication at <u>both</u> the gear end **and** drive end of the blower. Splash lubrication provides for longer bearing and seal life through improved heat dissipation versus grease lubrication.

Revolutionary Noise Reduction Technology

Many sizes of **COMPETITOR SL** blowers are available with Tuthill's unique noise reduction technology with tri-lobe rotors specially designed for maximum displacement and special porting on the discharge side to significantly reduce noise.

Helical Gearing

COMPETITOR SL blowers are timed with hardened, precision helical gears, keyed to the rotor shafts, <u>not</u> taper fit spur gears offered by other manufacturers which have greater backlash, and can slip and lose timing. Helical gears are also quieter, further reducing mechanical noise.

Stronger Bearings

<u>All</u> **COMPETITOR SL** blowers include <u>double row</u> ball bearings at the gear end, stronger than single row ball bearings offered by other manufacturers. Drive shaft bearing is cylindrical roller type for additional strength against side loading from V-belt drives. As a result of this superior design, **COMPETITOR SL** blowers offer significantly longer bearing life than models offered by other manufacturers.

Rotors with Integral Shafts

COMPETITOR SL blowers include precision machined ductile iron rotors with large, integrally cast shafts, <u>not</u> press fit and/or pinned shafts offered by other manufacturers, which can loosen over time and cause rotor clash. All rotors are dynamically balanced for vibration-free rotation.

Positive End Clearances

End clearances are positively established at the blower gear end, eliminating the risk of shifting end clearances when installing or removing drive components. This also eliminates the need for those special fork and saddle tools required by other brands to reset end clearances.

Polished Drive Shaft Sealing Surfaces

All shaft surfaces in contact with sealing members are polished to reduce seal wear and risk of leakage.

Individually Tested

Every **COMPETITOR SL** blower is factory tested to assure you of the highest quality. While some manufacturers perform only sample testing, Tuthill Vacuum & Blower Systems goes the distance to insure that <u>your</u> blower meets our rigid ISO 9001 registered quality standards.

ISO 9001 Registration

COMPETITOR SL blowers are manufactured under Tuthill Vacuum & Blower Systems ISO 9001 registered quality assurance program, the <u>first</u> American manufacturer of rotary blowers to gain such international recognition.

Versatility

COMPETITOR SL blowers can be field converted from horizontal to vertical flow, or vice versa, without <u>any</u> special tools <u>or</u> additional components.

Metric Availability

All **COMPETITOR SL** blowers are available with metric drive shaft and process connections.

Worldwide Sales and Service

With sales offices and service facilities located on six continents, you can be assured of availability and service for your **COMPETITOR SL** blowers.

Material Specifications:

Housing: Cast iron

End Plates: Cast iron

End Covers: Cast iron

Rotors: Ductile iron

Shafts: Ductile iron cast integrally with rotors

Bearings: Gear end - Double row ball, both rotors Drive end - Cylindrical roller on drive rotor Single row ball on driven rotor

Drive Shaft: Ductile iron, cast integrally with drive rotor

Gears: Heat treated alloy steel, helical cut

Seals: Lip seals on rotor shafts and drive shaft

Lubrication: Oil splash on both ends

Model Size	Maximum Nominal Pressure (PSIG)	Maximum Nominal Vacuum (in. Hg)	Maximum RPM
3002	15	16	
3003	12	15	3600
3006	7	15	
4002	15	16	
4005	10	16	3600
4007	7	15	
5003	15	16	
5006	13	16	2850
5009	8	15	
6005	15	16	
6008	14	16	2350
6015	7	14	



Performance

Pressure performance is based on inlet conditions of 1.02 kgf/cm2 A and 20° C. Vacuum performance is based on inlet temperature of 20° C and discharge pressure of 1.02 kgf/cm² A. In conjunction with our program of continuous testing and upgrading, all specifications are subject to change without notice. All data are approximate. Request a quotation for your specific application.







Blower	Style	SF	PEED	7 P	SIG	8 P	SIG	10 F	SIG	12 F	SIG	13 I		15		G p "	Max.	Vacu	IUM
Model		1	170	20	1.9	18	2.1				THE		111-				10	19.1	1.4
3002	2 Lobe	3	750 600	47 134	2.8 5.7	45 131	3.1 6.5	40 127	3.9 7.9	123	9.4	121	10.1	118	3 11	.6	16 16	28.0 114.4	3.1 6.4
3003	2 Lobe) 1) 1 3	170 760 600	28 64 178	2.4 3.6 7.4	61 175	4.1 8.3	169	10.3	164	12.2						10 14 15	26.9 48.6 157.8	1.7 3.5 7.7
3003	3 lobe	1 1 3	170 760 600	28 65 180	3.3 4.9 10.1	62 177	5.4 11.1	171	13.0	166	15.0						10 14 15	27.3 49.3 159.9	2.6 4.9 10.5
3006	2 Lobe) 1) 1 3	170 760 600	59 119 306	3.8 5.8 11.8												11 15 15	52.3 91.3 279.0	3.0 6.1 12.4
3006	3 lobe	1 1 3	170 760 600	59 120 309	4.7 7.1 14.6												11 15 15	52.8 92.2 281.7	3.9 7.4 15.2
4002	2 Lobe	e 1 3	880 760 600	16 70 181	1.8 3.6 7.4	67 178	4.1 8.3	62 174	5.0 10.2	58 170	5.9 12.1	56 168	6.4 13.1	164	4 15	5.0	10 14 16	15.5 56.5 160.6	1.3 3.5 8.2
4005	2 Lobe	e 1 3	880 760 600	39 146 368	3.4 6.9 14.0	35 141 364	3.9 7.8 15.9	133 355	9.6 19.7								9 14 16	42.6 121.6 331.2	2.2 6.7 15.7
4005	3 lobe	1 3	880 760 600	37 139 351	3.4 6.7 13.8	33 135 347	3.8 7.6 15.6	126 339	9.4 19.2								9 14 16	40.6 116.0 315.9	2.2 6.6 15.3
4007	2 Lobe)))))	880 760 600	52 192 486	4.5 8.9 18.3												10 14 16	49.4 160.3 436.6	3.2 8.8 20.4
4007	3 lobe	1 3	880 760 600	49 183 463	4.4 8.7 17.8												10 14 16	47.1 152.8 416.0	3.1 8.6 19.9
5003	2 Lobe	e 1	710 760 850	34 172 316	3.1 7.6 12.3	29 168 312	3.5 8.6 14.0	160 304	10.7 17.2	153 297	12.7 20.5	150 294	13.7 22.2	288	3 25	5.4	10 14 16	32.0 150.5 282.5	2.2 7.5 13.7
5006	2 Lobe	e 1	710 760 850	65 297 538	5.0 12.4 20.1	59 291 532	5.7 14.1 22.8	279 520	17.5 28.3	269 510	20.9 33.8	264 505	22.6 36.6				10 14 16	62.7 264.2 487.3	3.6 12.2 22.5
5006	3 lobe	1	710 760 850	65 299 540	5.4 13.4 21.7	59 292 534	6.1 15.1 24.4	281 522	18.5 30.0	270 512	21.9 35.5	265 507	23.6 38.2				10 14 16	63.0 265.4 489.5	4.0 13.2 24.1
5009	2 Lobe	e 1	710 760 850	112 451 803	7.2 17.9 29.0	104 443 795	8.2 20.4 33.0										11 14 15	100.0 409.4 750.5	5.6 17.6 30.4
5009	3 lobe	1	710 760 850	113 453 806	7.6 18.9 30.6	104 445 798	8.6 21.4 34.6										11 14 15	100.3 410.7 752.8	6.0 18.6 32.0
6005	2 Lobe	e 1	700 760 350	88 348 493	5.6 14.2 18.9	82 343 488	6.4 16.1 21.5	71 332 477	7.9 19.9 26.5	322 467	23.6 31.6	318 463	25.5 34.1	309 454) 29 1 39	9.3	12 16 16	71.9 301.5 446.7	4.8 15.8 21.1
6008	2 Lobe	e 1	700 760 350	141 559 792	8.8 22.2 29.6	131 550 783	10.0 25.2 33.7	114 533 766	12.4 31.3 41.8	517 750	37.4 49.9	510 743	40.4 53.9				12 15 16	115.4 497.9 717.2	7.5 23.3 33.1
6015	2 Lobe	e 1	700 760 350	263 1048 1484	16.2 40.7 54.4												10 14 14	256.7 956.6 1393.2	11.5 40.0 53.4
Dime	ensio	ns																	
Model	Style	A	в	с	D	Е	н	J1	J2	к	L1	L2	N1	N2	N3	Р	R	s	v
3002 3003	2-lobe	11.56 12.44	5.69 6.19	3.38 3.75	2.50	1¼" NP 2" NPT	T 6.7	5 3 8.94	12.81	3.94	7.25	7.25	5.00	8.50	5.00	12.19	1.75	6.75	.875
3006 3003	3-loba	14.81 12.38	7.38 6.13	4.94 4.19	2 06	21/2" NP 2" NP1	T 10.0	3	12 04	1.60	7.05	7.05	5.00	8 50	5.00	10.10	1 75	675	875
3006 4002	9-10De	14.75 12.94	7.31	5.38 3.69	2.00	21/2" NP	T 10.0	00 ^{9.03} 5	12.01	4.03	1.25	1.20	5.00	0.00	5.00	12.18	1.75	0.75	.0/5
4005 4007	2-lobe	15.69	7.63	5.06 5.94	3.00	21/2" NP 3" NPT	T 10.0	00 10.6	3 15.13	4.38	8.00	8.00	6.25	10.25	6.25	13.69	2.00	8.25	.875
4005	3-lobe	15.69 17.44	7.03 8.50	6.19	2.75	272 NP 3" NP1	111.	75 11.5	6 15.13	5.13	8.00	8.00	6.25	10.25	6.25	13.69	2.00	8.25	.875
5003 5006 5009	2-lobe	15.25 17.88 20.88	7.38 8.69 10.19	4.50 5.81 7.31	3.38	21/2" NP 4" NP1 4" NP1	1 8.3 11.0 14.0	8 00 12.1 00	3 17.38	5.38	10.50	10.50	6.75	11.25	6.25	17.19	2.50	8.75	1.125
5006 5009	3-lobe	17.88 20.88	8.69 10.19	6.13 7.63	3.13	4" NP1 4" NP1	11.0 14.0	06 06 13.2	5 17.38	6.50	10.50	10.50	6.75	11.25	6.25	17.19	2.50	8.75	1.125
6005 6008 6015	2-lobe	18.75 21.75 28.75	9.44 10.94 14.44	5.63 7.13 10.63	3.69	3" NPT 5" NPT 6" FLG	10. 13. 20.	3 15.0 3 15.0 3 16.4	6 6 21.69 4	6.25 6.25 7.50	17.00	11.00	8.75	14.75	8.75	19.81	3.00	11.75	1.375

Values shown are approximate and should not be used for construction. Certified drawings are available through your local Tuthill Vacuum & Blower Systems Sales Professional.

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