

Roots 59 URAI Blower

Comparison with Tuthill 5009 Dual Lobe Blower

The 5009 model is in the Tuthill / M-D Pneumatics Competitor series and is also referred to as a 5009 CP. This unit is available in either a 2-lobe or 3-lobe design. This comparison document applies to the 2-lobe unit.



SPECIFICATIONS

	ROOTS 59 URAI	TUTHILL 5009 CP
Flow Range:	to 857 CFM	To 824 CFM
Max Δ Pressure:	7 psi	7 psi
Max Δ Vacuum:	15" Hg	15" Hg
Maximum RPM:	2850	2850
Minimum RPM:	763	700
Max ΔT:	225° F	160° F
Connection:	4" FPT	4" FPT
Shaft Diameter:	1 1/8"	1 1/8"
Unit Weight:	204 lb	222 lb

LUBRICATION

Both the 59 URAI and 5009 CP utilize oil lubrication on the gear end and grease on the drive end.

	59 URAI	5009 CP
Required Oil (Horizontal Unit)	27.6 oz	18.3 oz
Required Oil (Vertical Unit)	16 oz	7.1 oz
Grease Type	Aluminum Complex NLGI #2	Lithium Complex NLGI #2

Gear End Oil Lubrication

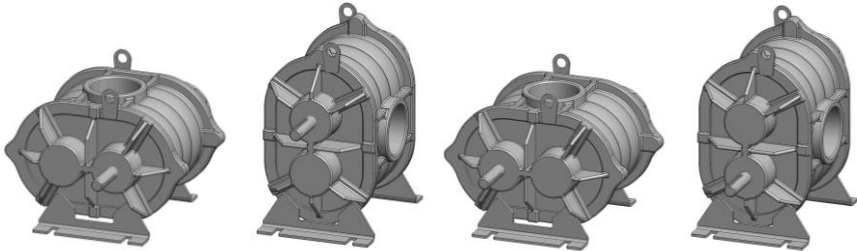
Blowers ship dry from factory and oil must be added before startup. Oil must be an industrial type non-detergent, rust inhibiting, anti-foaming oil of the correct viscosity. See your manual or contact us for assistance selecting the viscosity.

Drive End Grease Lubrication

These manufacturers use different types of grease which should not be mixed. If you plan to change to a different grease than the type that came in your blower, a full purge must be done.

CONFIGURATIONS

Both models feature movable mounting feet that allow the blower to be flipped into four different configurations. The manufacturer's part numbers are listed below.



	LEFT HAND	TOP DRIVE	RIGHT DRIVE	BOTTOM DRIVE
59	6511402L	6511402T	6511402R	6511402B
5009	5009-A6L2CV1-A	5009-A6T2CV1-A	5009-A6R2CV1-A	5009-A6B2CV1-A

*Characters in the Tuthill model designations indicate materials, configurations, and special options.

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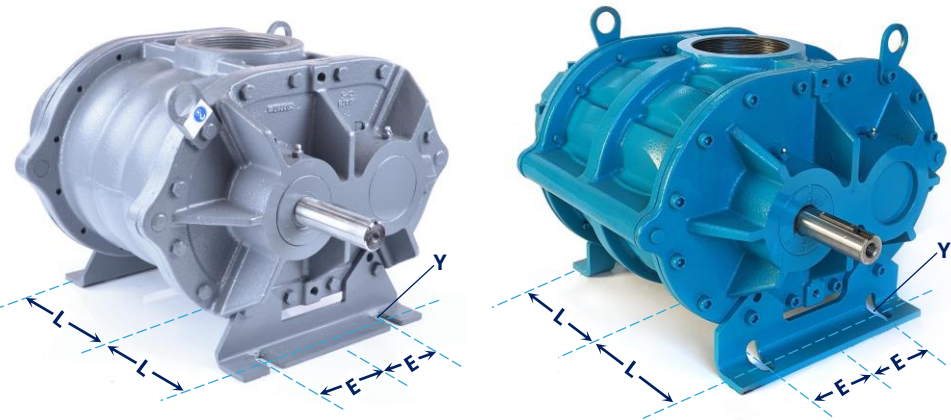
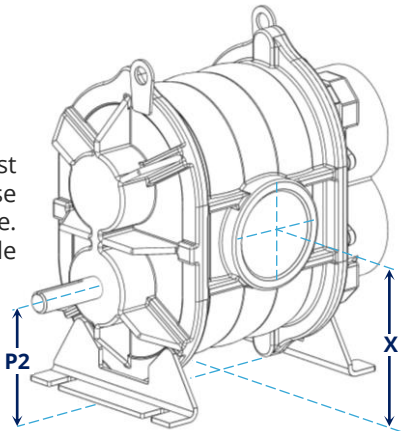
Dimensional Comparison with Tuthill 5009

While these are considered drop-in equivalents, there are minor differences which should be considered for your situation.

SHAFT AND CONNECTIONS

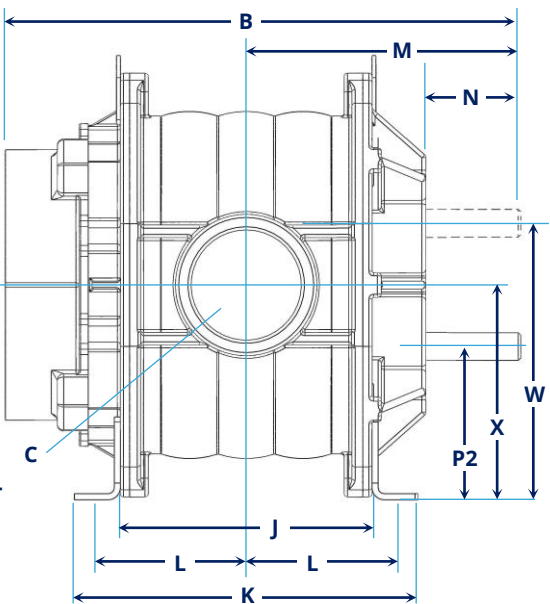
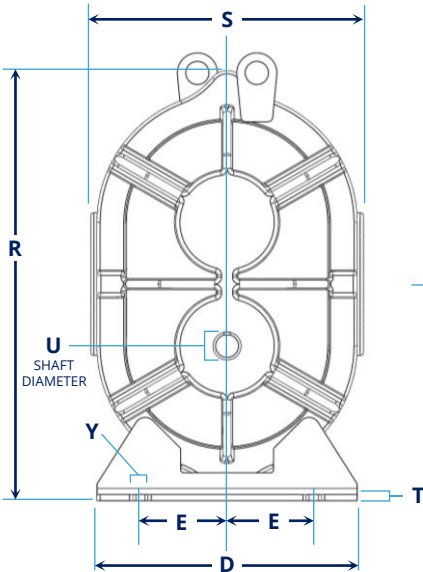
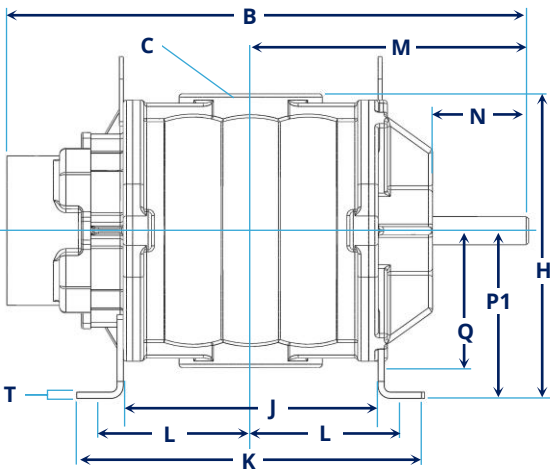
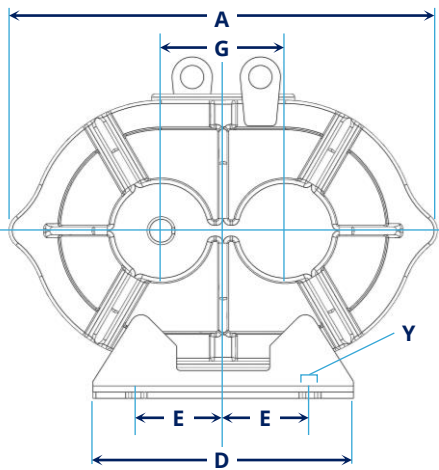
Shaft size (U) and connection size (C) are the most important dimensions to compare. With these two models both measurements are the same. Tuthill blowers have ductile iron shafts while Roots shafts are steel.

To determine whether any changes to your piping or enclosure will be needed, take note of the placement of the connections (X,H) and the shaft (P,W).



MOUNTING FEET

The placement of the bolt slots in the mounting feet is also important to consider. Both units feature universal mounting feet that can be moved to accommodate changes in configuration.

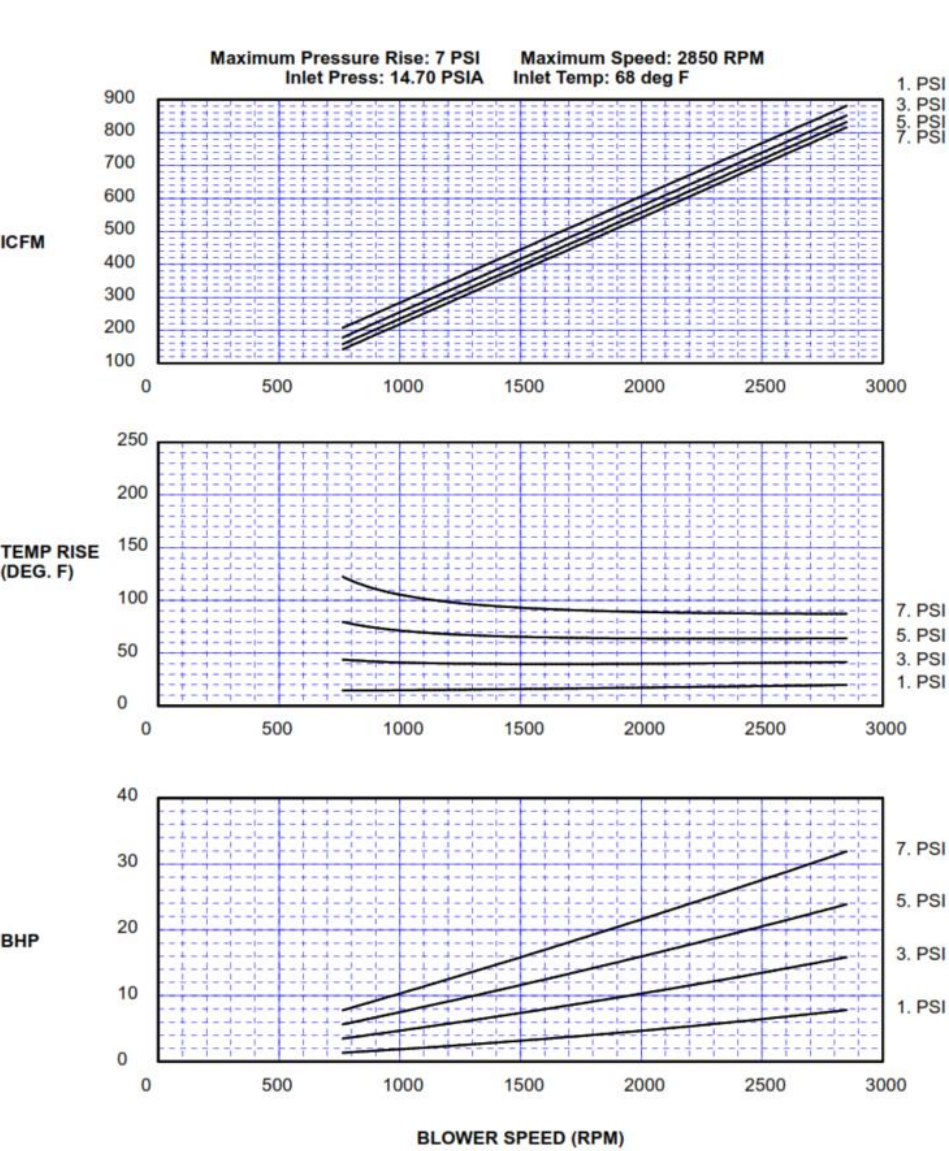


MAKE	MODEL	A	B	C	D	E	G	H	J	K	L	M	N	P1	P2	Q	R	S	T	U	W	X	Y
Roots	59 URAI	17.25	21	4" NPT	10.5	3.5	5	12.25	10.24	14	6.0 - 6.5	11.19	3.88	6.75	6.25	5.5	17.38	11	0.25	1.125	11.25	8.75	0.5 x 1.63
Tuthill	5009 CP	17.19	20.88	4" NPT	10.5	3.5	5	12.13	10.3	14.06	6.25	10.69	3.38	6.75	6.25	5.38	17.38	10.76		1.125	11.25	8.75	5/8" bolts

All measurements shown in inches

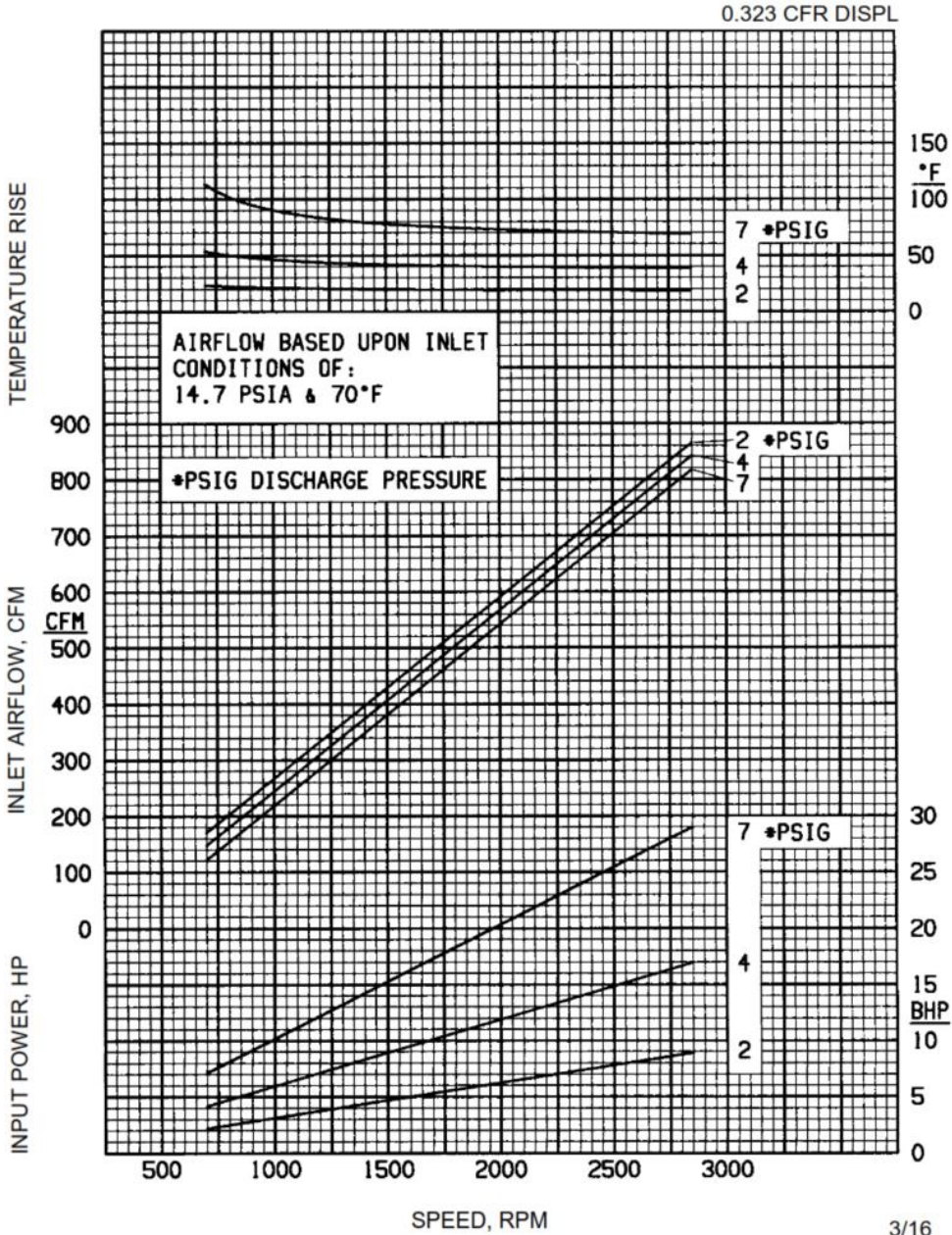
Roots 59 URAI

PRESSURE PERFORMANCE



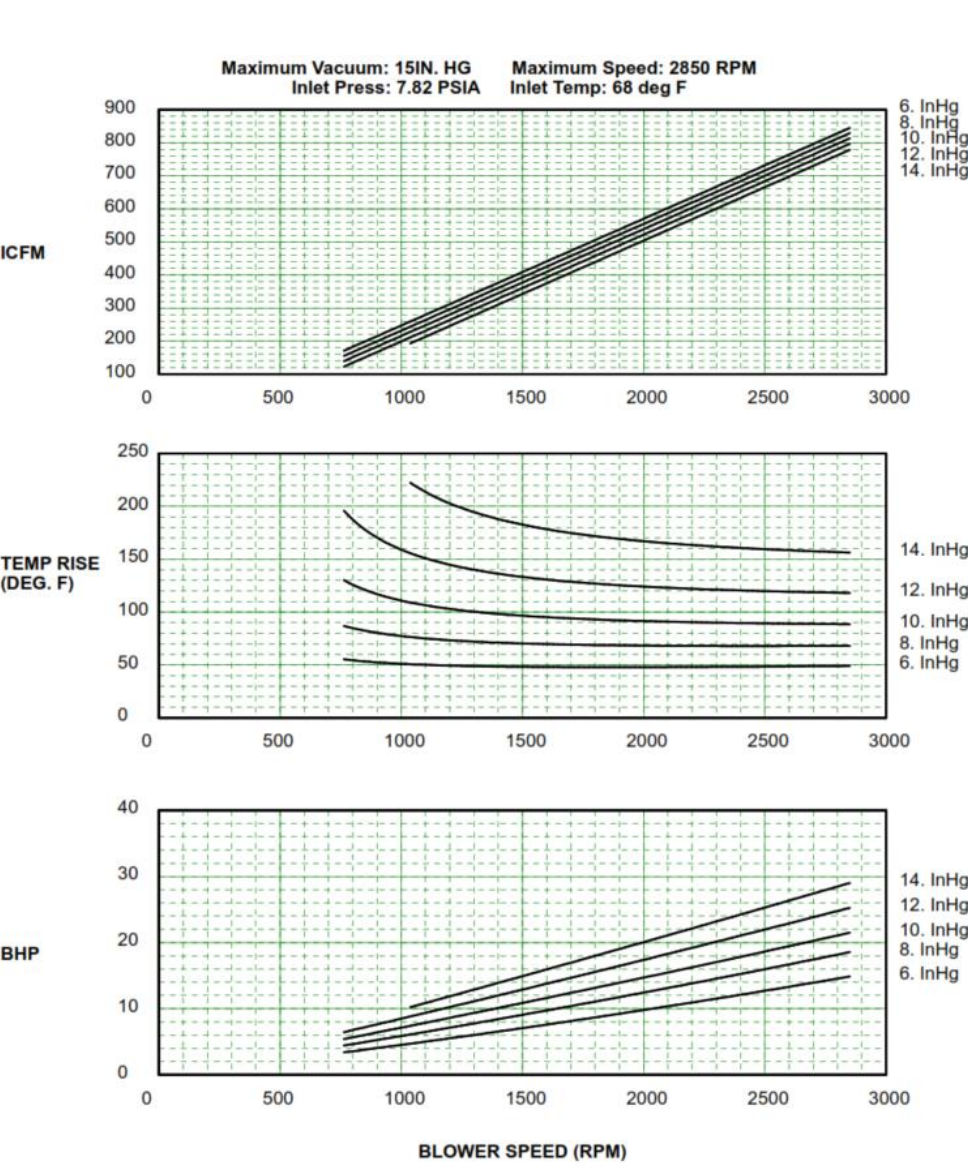
Tuthill 5009 CP

PRESSURE PERFORMANCE



Roots 59 URAI

VACUUM PERFORMANCE



Tuthill 5009 CP

VACUUM PERFORMANCE

