

ROOTS® Universal RAI-G™



Design and Construction Features

- Mechanical seals
- Rigid one-piece cast iron casing
- Anti-friction bearings
- Splash oil lubricated spur timing gears
- Connections in standard pipe sizes
- Straight, precision machined two-lobe impellers
- Ground steel shafts
- Detachable steel mounting feet

Universal RAI-G™ gas blowers are heavy duty rotary blowers designed with mechanical seals and rugged steel mounting feet. Optional feet are available for horizontal installations. The compact, sturdy design is engineered for continuous service when operated in accordance with speed and pressure ratings.

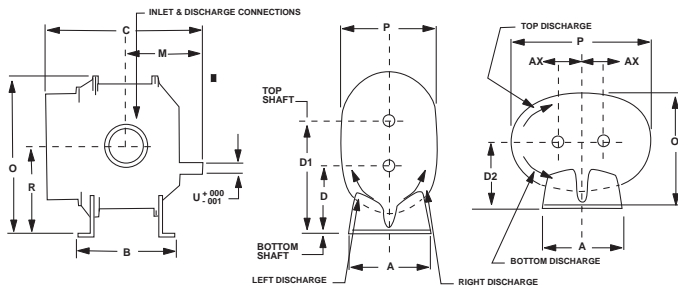
Basic blower description

The basic model consists of a cast iron casing, carburized and ground alloy steel spur timing gears secured to steel shafts with a taper mounting and locknut, and cast iron involute impellers. Oversized anti-friction bearings are used, with a cylindrical rollerbearing at the drive shaft to withstand V-belt pull. The Universal RAI-G™ features splash oil lube on the gear end and grease lube on the drive end. ROOTS® exclusive “figure-eight” gearbox design improves oil distribution to maximize gear and bearing life.

Each unit is mechanically tested and given a 15 psig static leak test. A 1/8” NPT purge port is provided at each seal for buffer gas application as required. After testing, the unit is sprayed with a protective paint, and boxed or skid mounted for delivery.

Accessories are available through our distributors. ROOTS synthetic oil and grease is highly recommended.

Outline drawing & dimensional table



Frame size	A	A'	B	C	D	D1	D2	M	O	O'	P	P'	R	U	Inlet Disch.	AX	Wgt.
32	7.25	7.25	6.75	11.25	5	8.5	5	5.81	12.81	8.88	7.75	12.13	6.75	0.75	1.25 NPT	1.75	69
33	7.25	7.25	7.63	12.13	5	8.5	5	6.25	12.81	8.88	7.75	12.13	6.75	0.75	2.0 NPT	1.75	74
36	7.25	7.25	10	14.63	5	8.5	5	7.56	12.81	8.88	7.75	12.13	6.75	0.75	2.5 NPT	1.75	102
42	8	8	7.25	13	6.25	10.25	6.25	6.86	15.06	10.63	8.75	13.63	8.25	0.875	1.5 NPT	2	88
45	8	8	10	15.5	6.25	10.25	6.25	8	15.06	10.63	8.75	13.63	8.25	0.875	2.5 NPT	2	109
47	8	8	11.75	17.63	6.25	10.25	6.25	9.25	15.06	10.5	8.5	13.63	8.25	0.875	3.0 NPT	2	128
53	10.5	10.5	8.38	15.38	6.25	11.25	6.75	8.18	17.38	11.88	10.25	17.25	8.75	1.125	2.5 NPT	2.5	143
56	10.5	10.5	11	18	6.25	11.25	6.75	9.19	17.38	12.25	11	17.25	8.75	1.125	4.0 NPT	2.5	170
59	10.5	10.5	14	21.18	6.25	11.25	6.75	11.19	17.38	12.25	11	17.25	8.75	1.125	4.0 NPT	2.5	204
65	11	11	10	18.38	8.75	14.75	8.75	9.19	21.63	15.13	12.75	19.75	11.75	1.375	3.0 NPT	3	245
68	11	11	13	21.38	8.75	14.75	8.75	10.82	21.63	15.13	12.75	19.75	11.75	1.375	5.0 NPT	3	285
615	11	11	20	28.38	8.75	14.75	8.75	14.32	21.63	16.25	15	19.75	11.75	1.375	06.0 FLG	3	425

