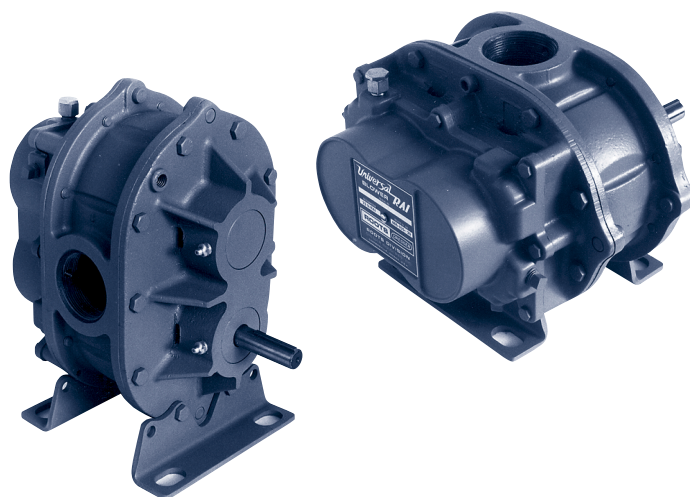


- Discharge pressures to 1000 mbar
- Capacities to 4027 m³/h

Design Features/User Benefits

- Universal RAI® blowers are heavy duty rotary blowers designed with detachable rugged steel mounting feet, which permit easy infield adaptability to either vertical or horizontal installation requirements. Universal RAI blowers can even be hung from overhead supports. Installation costs can be reduced by the versatility of mounting arrangements. Self-contained packaged units are also available.
- The compact, sturdy design is engineered for continuous service when operated in accordance with speed and pressure ratings.
- With a choice of 17 frame sizes, there's a Universal RAI that fits right into your OEM or replacement application.
- Each Universal RAI blower is precision machined on the latest CNC equipment, assuring close tolerances between the impellers, cylinder and headplates to minimise "back-slippage" of air, improving efficiency and reliability.
- Timing gears are secured to alloy steel shafts with taper mountings and locknuts. This eliminates the need for unreliable taper pins, aiding field maintenance.
- Dynamically balanced original Roots impellers are centre timed to allow either clockwise or anti-clockwise rotation.
- Oversized cylindrical roller bearings at the drive shaft withstand Vee-belt stress. All bearings are engineered for reliable, long service life. Thrust control is provided.
- Drive shaft diameters permit the use of Vee-belt drives without the need for additional bearings for support.
- Universal RAI blowers are constructed with air gaps which isolate bearing and gear lubricants from the compression chamber.
- "Figure 8" gearbox design improves oil distribution for longer gear and bearing life with smoother operation.
- Each Universal RAI is tested before shipment.
- Available accessories include motor, relief valve, inlet and discharge silencer, inlet filter, non-return valve, base frame, Vee-belt or flexible coupling drive and drive guards.



Specifications

Casing: The headplates and one piece cylinder are manufactured from cast iron, and the gearbox is aluminium.

Impellers and shafts: Impellers are cast iron with pressed-in ground alloy steel shafts, dynamically balanced after impeller assembly.

Gears: Carburised and ground alloy steel spur timing gears are precision machined and taper fitted to the shafts.

Lubrication: Grease lubrication is used on the drive end with oil lubrication on the gear end.

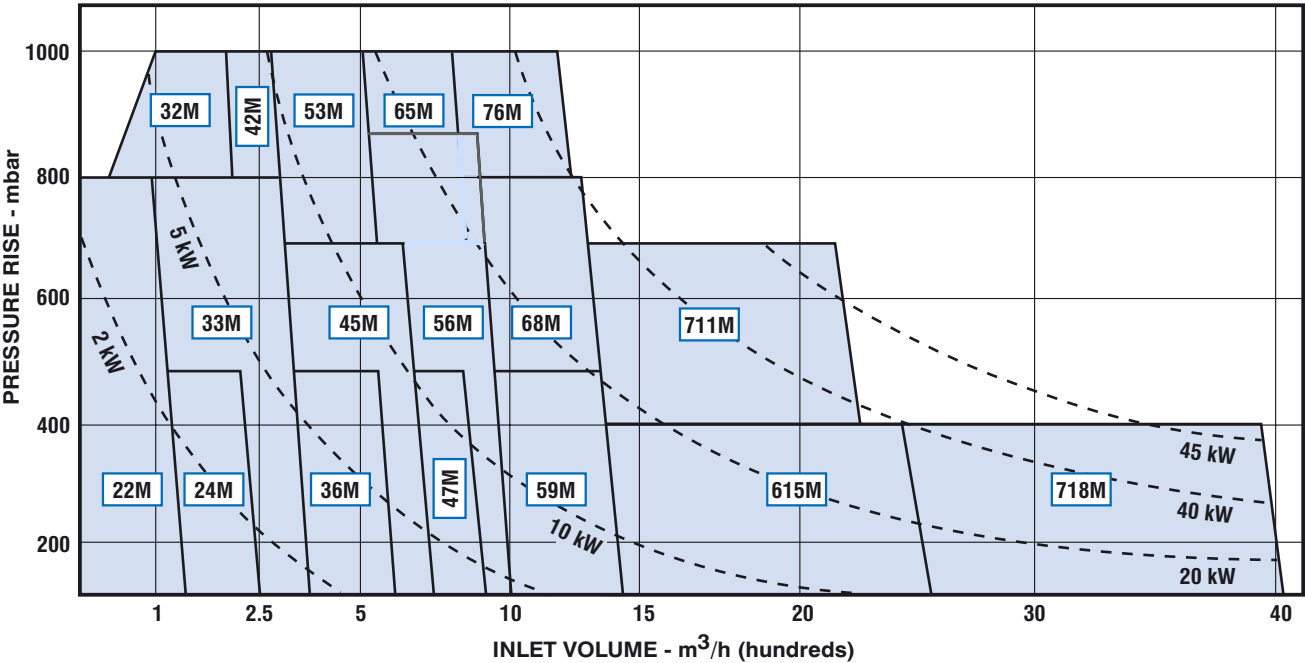
URAI-DSL available with splash lubrication at drive and gear end on 3 to 6 frame sizes.

Mounting Feet: The Universal RAI can be easily changed from horizontal flow to vertical flow by interchanging its rugged steel mounting feet and repositioning the gearbox breather. The units are even interchangeable with the mounting holes of many competitive blowers.

Drive shaft location: Right hand, left hand, top or bottom drive shaft positions are obtained as required by switching mounting feet and repositioning the gearbox breather.

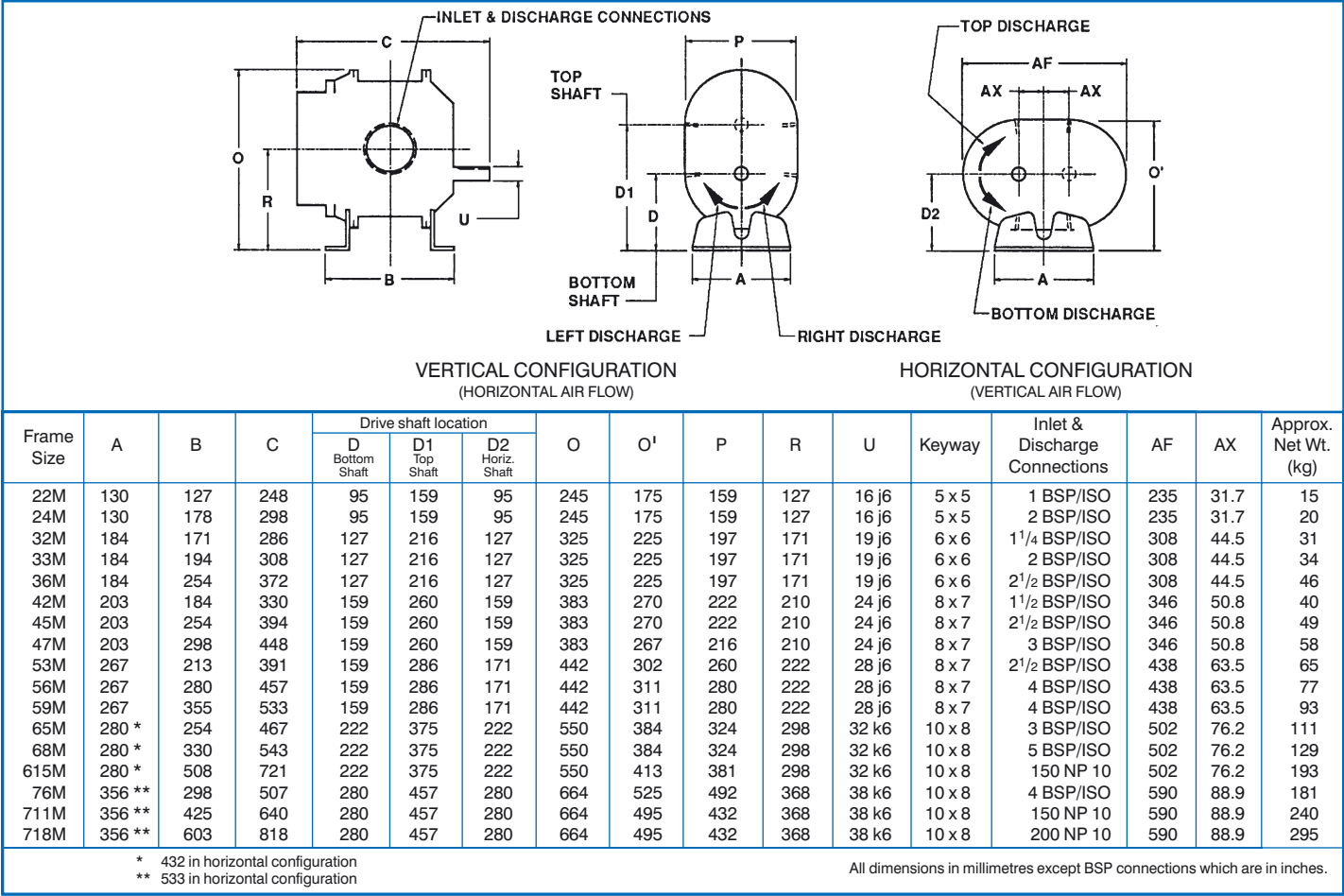
Universal RAI[®] positive displacement air blowers

PERFORMANCE MAP



Notes: 1. Pressure ratings based on inlet air at standard pressure of 1013 mba, standard temperature of 20°C.
2. Universal RAI blowers may also be used on vacuum service. For performance charts, contact sales office.

OUTLINE DRAWING & DIMENSIONAL TABLE



The original **ROOTS** blower™

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