

EX5500 ATEX Series Blowers

EX5500 ATEX Series heavy duty industrial blowers are designed for high performance applications, up to 18 PSI pressure or 17" Hg dry vacuum. ***

Features

Vertical Flow Double Envelope Gas Service

Built to standards where virtually complete sealing is required. Plugged vents can also accept an inert gas purge for positive containment of the process gas. The drive shaft is mechanically sealed and the oil sumps are plugged to provide an even higher degree of leakage protection.

Cooling Coils

All EX5500 ATEX models come standard with copper cooling coils to provide cooling of lubricating oil with 1.9 LPM cooling water. Stainless steel cooling coils are an available option for all units.

Stainless Steel External Tubing

All units come standard with stainless steel external tubing for the cooling coil crossover.

Instrumentation Ports

All units provide multiple instrumentation connection locations to allow for the installation of temperature, pressure and vibration monitoring equipment.

Metric Drive Shaft and Ports Standard

All EX5500 Series units come standard with metric and are available with imperial sized drive shaft and process connections.

ATEX Performance

Tuthill's EX5500 ATEX Series was designed to be able to perform to high-quality standards specifically required for hazardous areas. A hazardous area is defined as an area in which potential or existing flammable medium atmospheres are present in quantities that require special precaution for the construction and use of equipment.

Hydrogen or Oxygen Service Application Available

- ✓ Hydrogen content greater than 0.5% by volume and operating suction with discharge pressure >100 Torr
- ✓ Oxygen content greater than 23.5% by molar percentage.

Applications

This series is utilized in multiple applications including pneumatic conveying of plastics, process gas handling, biogas treatment and compression, gas boosting, or elevated pressure applications up to 2.4 bar (35 psig) mawp differential discharge.

***Tuthill's VBXpert Portal Conditions of Service required for these values. A VBXpert Portal Conditions of Service print out is required with each PO submission.



External Classification:

Zone: 1 or 2 | Gas Group: IIA, IIB, or IIB+H2
Temp Class: T3, T2, or T1

Material Specifications:

Housing:	Cast iron
End Plates:	Cast iron
End Covers:	Gear end - Cast iron Free end - Cast iron
Rotors:	Ductile iron
Shafts:	Ductile iron cast integrally with rotor
Bearings:	Gear (drive) end - Double row ball Free (back) end - Cylindrical roller Drive shaft - Spherical roller
Drive Shaft:	SAE 4140 forged alloy steel
Gears:	Alloy steel, helical cut
Seals:	Double Envelope Gas Service - Mechanical and labyrinth type on rotor shafts plus mechanical sealing on the drive shaft. Oil Sumps are sealed.
Lubrication:	Oil splash system, each cover holds 1.7L of MD PLUS Oil.

All EX units undergo 10.34 bar hydrostatic validation and performance testing before shipment.

Special Materials Available

Standard construction materials include cast iron housing, end plates and port fittings with ductile iron rotors and shafts. In addition to standard construction, the following materials are available:

Ductile Iron - All models

Note: Ductile Iron is required for Hydrogen Applications

Stainless Steel - EX5507 & EX5514 only

Additional Options:

- SST Vent To Drain
- Material Certification
- Stainless Steel Cooling Coils

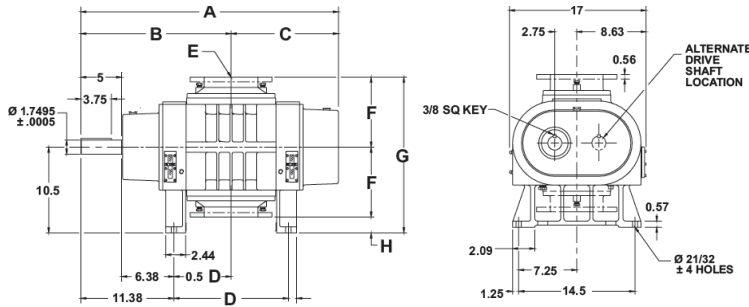
ATEX Blower Dimensions



Model	Series	A	B	C	D	Shaft Diameter	E	F	G	Net Weight*
		mm (in)	mm (in)	mm (in)	mm (in)	mm (in)	mm (in)	mm (in)	mm (in)	kg (lbs)
EX5507	Standard Shaft	823.5 (32.42)	535.5 (21.08)	288.1 (11.34)	254 (10)	38 (1.5)	150 (6)	254 (10)	520.7 (20.5)	218 (480)
EX5511	Standard Shaft	925.1 (36.42)	586.3 (23.08)	338.9 (13.34)	355.6 (14)	38 (1.5)	150 (6)	254 (10)	520.7 (20.5)	281 (620)
EX5514	Standard Shaft	1001.3 (39.42)	624.4 (24.58)	377 (14.84)	431.8 (17)	38 (1.5)	150 (6)	254 (10)	520.7 (20.5)	327 (720)
EX5518	Standard Shaft	1102.3 (43.42)	675.2 (26.58)	427.8 (16.84)	533.4 (21)	38 (1.5)	200 (8)	254 (10)	520.7 (20.5)	354 (780)

*Approximate shipping weight.
 Dimension values are approximate and should not be used for construction.
 Certified prints are available through your local Tuthill Vacuum & Blower Systems Sales Professional.

Bare Shaft



Performance Tables

The data shown provides a sampling of the product performance capability. Our application software **VBXpert Portal** (available at www.tuthillvacuumblower.com) is required for all ATEX EX configurations. Create your own or request a VBXpert Portal quotation for your specific application.

Unit Technical Data										
Unit	Gear Size	Max Differential Pressure**	Maximum Vacuum	Max / Min RPM	Max Allowed Working Pressure	Port Size	Max Discharge Temp	Drive Shaft Diameter Standard	Rotor Shaft Material	Drive Shaft
	mm (in)	Bar (PSIG)	mbar (in-Hg)		Bar (PSIG)	DIN (Flange)	C° (F°)	mm (in)	Materials of Construction	
EX5507	139.7 (5.5)	0.689 (10)	508 (15)	3600 / 1150	2.344 (34)	150 (6)	177° (350°)	38 (1.5)	Ductile Iron*	Steel*
EX5511	139.7 (5.5)	0.689 (10)	508 (15)		2.344 (34)	150 (6)		38 (1.5)		
EX5514	139.7 (5.5)	0.689 (10)	508 (15)		2.344 (34)	150 (6)		38 (1.5)		
EX5518	139.7 (5.5)	0.689 (10)	508 (15)		2.344 (34)	200 (8)		38 (1.5)		

* See VBXpert Portal for Ductile Iron and Stainless Steel materials of construction.
 ** See VBXpert Portal Conditions of Service for additional differential pressure values
 For air at 20°C (68°F) inlet temperature. Use VBXpert Portal sizing software for other conditions.

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