



## Authorized Hibon Distributor, Warranty, Service & Repair Facility

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### VTB 807.XL Air Injection Blower

Call **1-780-962-1827** for technical, application and sales support.

Hibon Ingersoll Rand presents new state-of-the-art technology in three-lobe, positive displacement blowers. The VTB 807.XL offers a wide range of design features and incorporates energy efficiency improvements, complying with the strictest operational requirements of a variety of applications. The VTB XL series air-injected, high-vacuum blowers are ideally suited for the rigorous demand of the vacuum truck and industrial vacuum markets. Hibon is a worldwide leader in three-lobe positive displacement blower technology with thousands of units installed around the globe.

- Three-lobe impeller construction
- Unique air injection system
- Increased efficiency
- Clearances adjusted automatically during assembly
- Larger oil capacity
- Higher volume oil thrower
- High performance sealing arrangement using 4 piston rings
- Quieter operation than two-lobe impeller construction
- Allows high vacuum including "dead end" operation without overheating
- No oil or water cooling system (100% oil free air)
- Requires less horsepower for the same performance
- Easier maintenance
- Runs cooler
- Better lubrication of bearings
- Less frequent oil changes

### Specifications

Max Vacuum	27" Hg
CFM	942
Maximum RPM	4800
Minimum RPM	2600
Max Outlet (discharge) Pressure	Atmospheric Pressure + Max Differential Pressure
Max Inlet Pressure	Atmospheric Pressure
Max Outlet Vacuum	Atmospheric Pressure
Max Inlet Vacuum	100 mbar, 1.01 x 10 <sup>4</sup> Pa, 75.75 Torr
Max Differential Pressure (inlet-outlet)	1100 mbar 1.1 x 10 <sup>5</sup> Pa, 825 Torr
Shaft Dia.	1.65" (42mm)
Drive End Lubrication	Hibon Lube
Opposite Drive End Lubrication	Hibon Lube
Drive End Cover – Horiz	0.83 Litres (0.22 US gal)
Drive End Cover – Vert	0.5 Litres (0.13 US gal)
Opp. Drive End Cover – Horiz	1.3 Litres (0.30 US gal)
Opp. Drive End Cover - Vert	0.75 Litres (0.20 US gal)
Bare Unit Weight	346 Lbs
Container	Wood Skid
Shipping Weight on Skid	396 lbs
Shipping Options	Ground Freight, Air or Sea



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**VTB 807.XL Approximate Oil Fill Amounts**

Model No. / Drive Shaft Location	Drive End Cover		Opposite Drive End Cover	
	Liters	US Gal.	Liters	US Gal.
VTB 807.XL (Horizontal)	0.83	0.22	1.13	0.30
VTB 807.XL (Vertical)	0.5	0.13	0.75	0.2

These capacities are provided to assist stocking the correct amount of oil. Exact sump capacity may differ slightly. Review the proper filling instructions in OEM Manual.

**VTB 807.XL Lubrication Data**

Parameter	Standard Use	Special Use
Density (at 15 °C, 59 °F)	0.89	0.86
Mean pour point	21 °C (70 °F)	45 °C (113 °F)
Mean flash point	224 °C (435 °F)	260 °C (500 °F)
Viscosity: At 20 °C (68 °F)	8.09 x 10 <sup>-4</sup> m <sup>2</sup> s <sup>-1</sup> (809 cSt)	6.04 x 10 <sup>-4</sup> m <sup>2</sup> s <sup>-1</sup> (640 cSt)
At 40 °C (212 °F)	2.2 x 10 <sup>-4</sup> m <sup>2</sup> s <sup>-1</sup> (202 cSt)	2.18 x 10 <sup>-4</sup> m <sup>2</sup> s <sup>-1</sup> (218 cSt)
At 100 °C (212 °F)	1.8 x 10 <sup>-5</sup> m <sup>2</sup> s <sup>-1</sup> (18 cSt)	2.7 x 10 <sup>-5</sup> m <sup>2</sup> s <sup>-1</sup> (27 cSt)
Mean viscosity index	93	149
Recommended Oil	Hibon Lube	Contact Fraserwoods

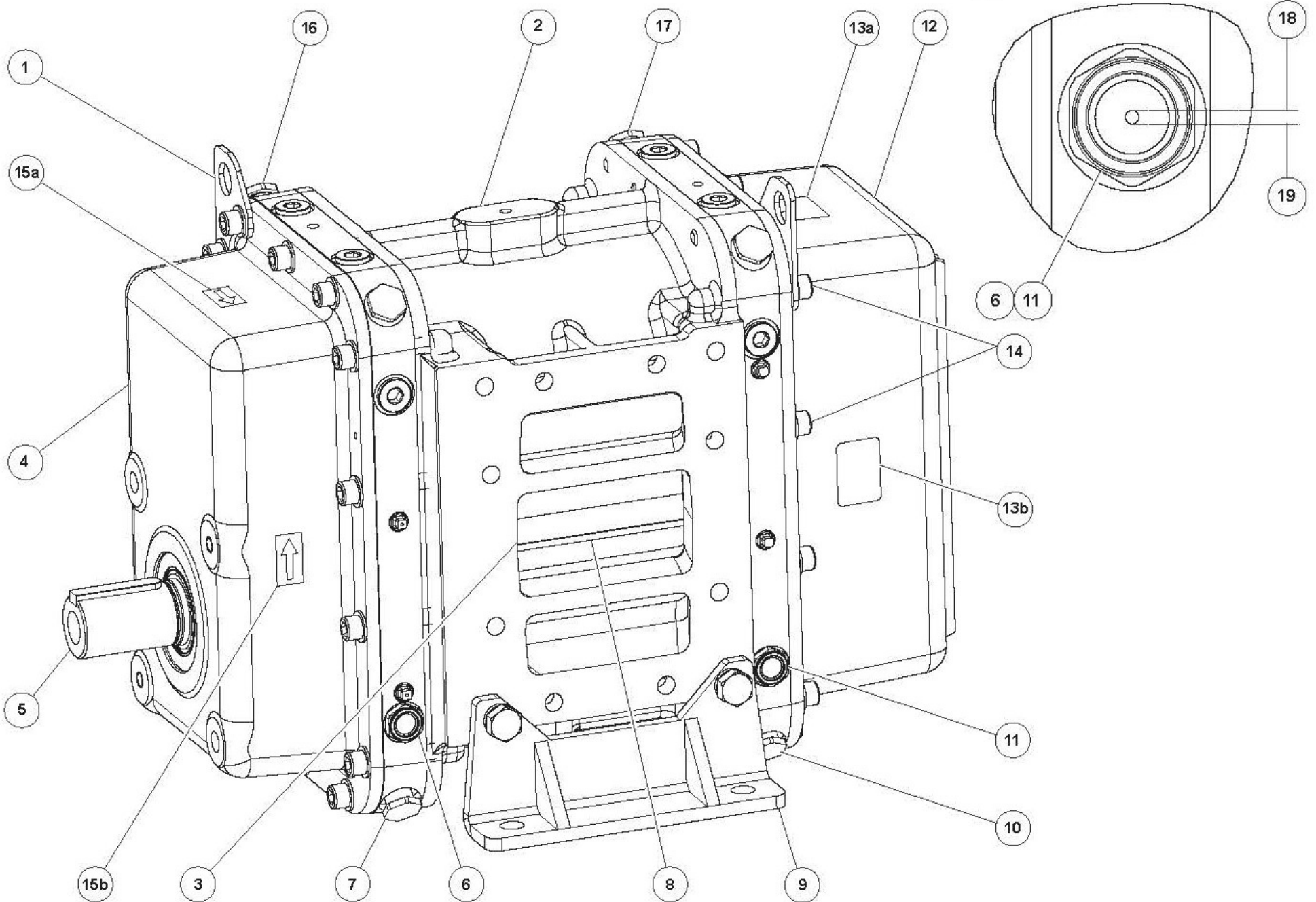
**VTB 807.XL Noise and Vibration Data**

Noise Level - dB(A)	Vibration Level
113	5 mm.s <sup>-1</sup> (0.2 inch s <sup>-1</sup> )

**VTB 807.XL Components**

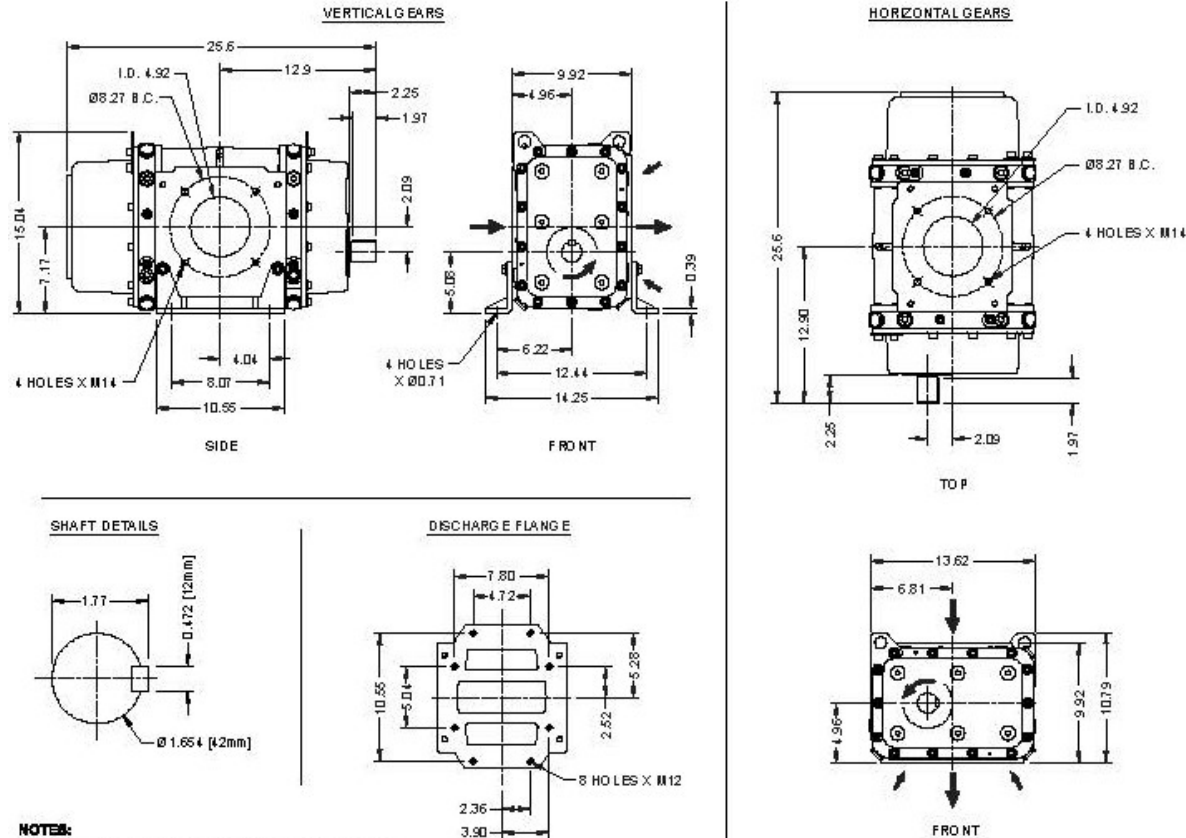
Item Number	Part Name
1	Lifting lugs
2	Inlet (behind blower)
3	Discharge (outlet)/injection ports
4	Drive end cover
5	Drive shaft
6	Oil level sight glass (drive head plate)
7	Drive end oil drain plug
8	Rotors
9	Mounting feet
10	Non drive end oil drain plug
11	Oil-level sight glass (non-drive head plate)
12	Non-drive end cover
13a	Identification and rating plate (vertical position)
13b	Identification and rating plate (horizontal position)
14	Head plate bolts
15a	Direction of rotation arrow (vertical position)
15b	Direction of rotation arrow (horizontal position)
16	Oil filler plug (drive head plate)
17	Oil filler plug (non-drive head plate)
18	Maximum oil level
19	Minimum oil level

# VTB 807.XL Blower



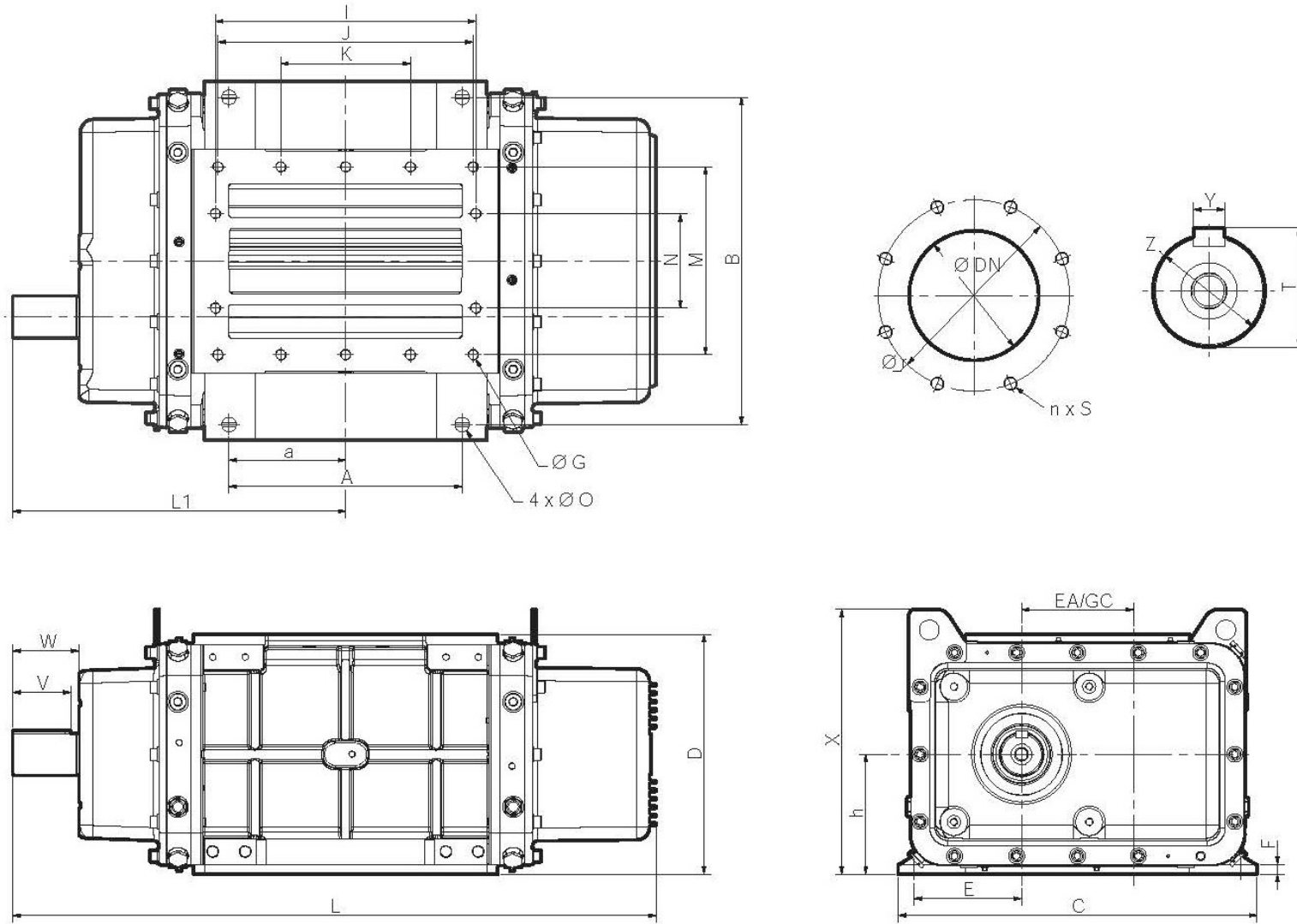
BLOWER	SPEED RPM	VACUUM PERFORMANCE															
		9" Hg		12" Hg		15" Hg		18" Hg		21" Hg		24" Hg		26" Hg		27" Hg	
		CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP
<b>VTB 807.XL</b> (942 CFM*) *Volume Displacement at Maximum Speed	2600	409	10	389	13	352	17	317	20	266	24	104	26	-	-	-	-
	2900	463	12	444	16	409	19	374	23	322	27	159	30	-	-	-	-
	3200	418	14	499	18	466	22	431	26	379	30	214	33	44	37	-	-
	3500	572	16	554	20	523	24	488	28	435	33	268	36	100	40	-	-
	3800	626	18	609	22	580	26	545	31	491	36	323	40	156	44	-	-
	4000	662	19	645	24	619	28	583	33	529	38	359	42	193	47	-	-
	4200	699	20	682	25	657	30	622	35	566	40	396	44	230	49	21	51
	4400	735	21	719	27	695	31	660	37	604	42	432	46	267	52	63	54
	4600	771	22	755	28	733	33	698	38	641	43	469	4	305	55	105	56
	4800	807	24	792	30	771	34	736	40	679	45	505	51	342	57	147**	59**

\*\* For intermittent use only (15 min/hour)



- NOTES:**
1. ENGLISH UNITS (INCH) UNLESS OTHERWISE NOTED.
  2. WEIGHT: 344 lbs.
  3. C.W. SHAFT ROTATION ALSO AVAILABLE ON REQUEST.
  4. DO NOT USE FOR CONSTRUCTION.

## VTB 807.XL Blower Dimensions: Horizontal Orientation



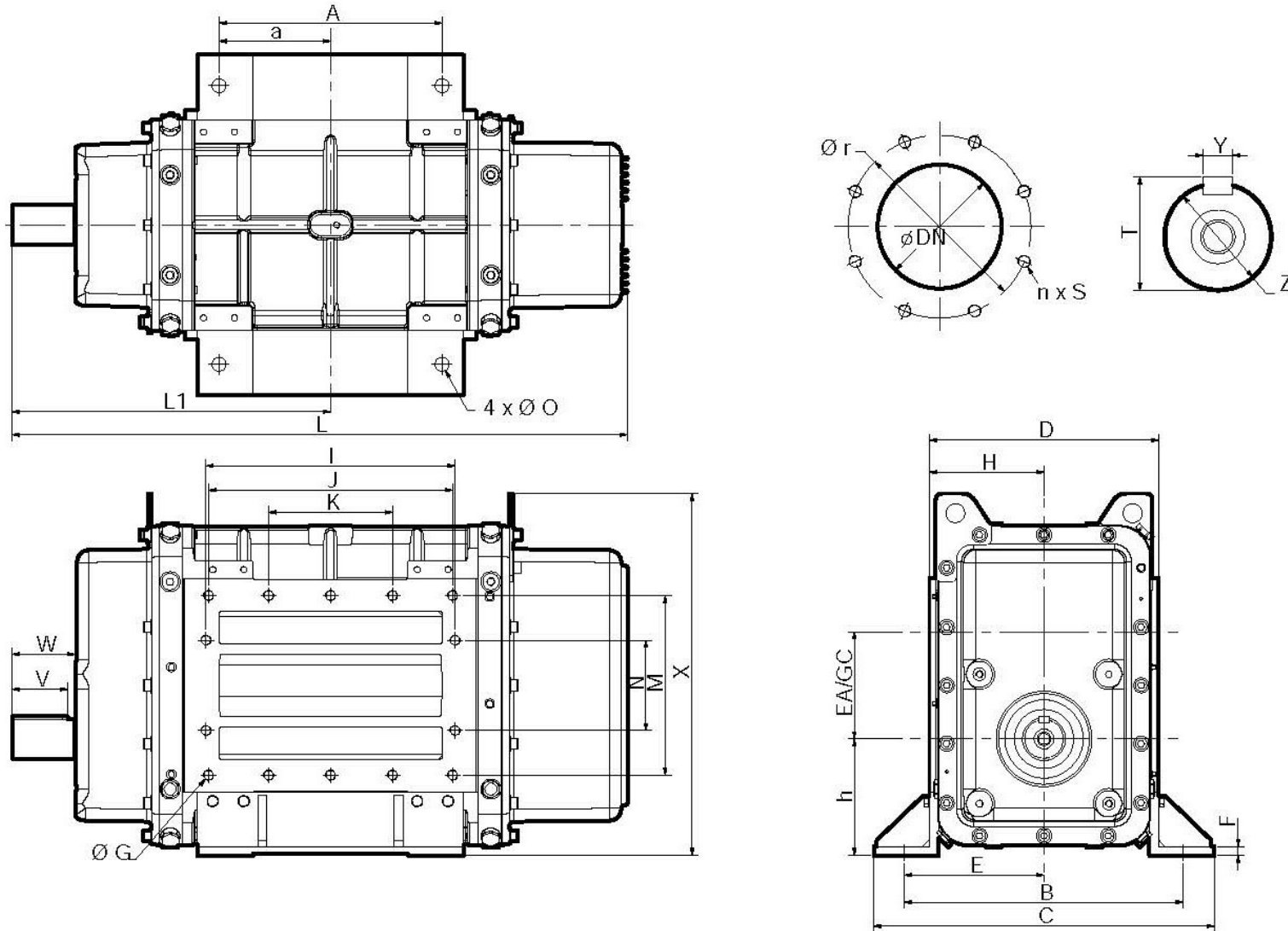
**VTB 807.XL Dimensions – Horizontal Orientation**

A	a	B	C	D	E	F	GC/EA	G	h	I	J	K	L	L1
-	-	-	13.62	9.92	-	-	4.17	8 x M12	4.96	7.80	4.72	-	25.59	12.91
M	N	ØO	Ør	n x S	T	ØDN	V	W	X	Y	ØZ*	<ul style="list-style-type: none"> <li>Fitting tolerance range: m6</li> </ul>		
10.55	5.04	-	8.27	4 x M14	1.77	4.92	1.97	2.24	10.79	0.47	1.65			

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### VTB 807.XL Blower Dimensions: Vertical Orientation



**VTB 807.XL Dimensions – Vertical Orientation**

A	a	B	C	D	E	F	GC/EA	G	H	h	I	J	K	L
8.07	4.04	12.44	14.25	9.92	6.22	0.39	4.17	8 x M12	4.96	5.08	7.80	4.72	-	25.59
L1	M	N	ØO	Ør	n x S	T	ØDN	V	W	X	Y	ØZ		
12.89	10.55	5.04	0.71	8.27	4 x M14	1.77	4.92	1.97	2.24	15.04	0.47	1.65		



# VTB.XL Series Air injection Vacuum Blower

**Better by design**

With over 100 years of experience, Hibon is a market leader with a world-class range of air blowers and vacuum equipment used to provide air/gas volumes for pressure and vacuum applications.

Continuous research and development of the **hibon** Product range has led to the introduction of the new **VTB.XL** Series Air Injection blowers.

Their new design incorporates the benefits of improved assembly, lifetime reliability, better performance and interchangeability with the previous range, as well as smaller blower units.

## Range


Blowers	Free air delivery* maxi
VTB 805.XL	1 007 m <sup>3</sup> /h
VTB 807.XL	1 570 m <sup>3</sup> /h
VTB 810.XL	1 901 m <sup>3</sup> /h
VTB 820.XL	2 822 m <sup>3</sup> /h
VTB 822.XL	4 635 m <sup>3</sup> /h
VTB 840.XL	6 492 m <sup>3</sup> /h
VTB 8602.XL	7 800 m <sup>3</sup> /h
VTB 8702.XL	9 690 m <sup>3</sup> /h
VTB 8902.XL	11 400 m <sup>3</sup> /h

\* At maximum speed.

Vacuum up to 95%

Pressure up to 1 bar g. ; To 1.2 bar g. from VTB 840.XL

## Features

**Rotors:** Three-Lobe Rotors with a one-piece, integral lobe and shaft design for improved quality and reliability. Available in **ATEX** on request.  II 2/2 G/D c, II BT3, 160° C X

**Gears:** Helical gears located on the opposite drive side.

**Bearings:** Four sized bearings for lifetime reliability.

**Oil reservoir:** Large oil reservoir for improved bearing lubrication.

**Oil thrower:** Oil thrower and oil passages for good bearing lubrication and long life.

**Seals: For air :** An innovative and unique design that includes 4 piston rings and a shield. **For an oil free operation :** Dynamic shaft seals arrangement with deflector.

**Shaft seals:** Innovative dynamic shaft seals arrangement.

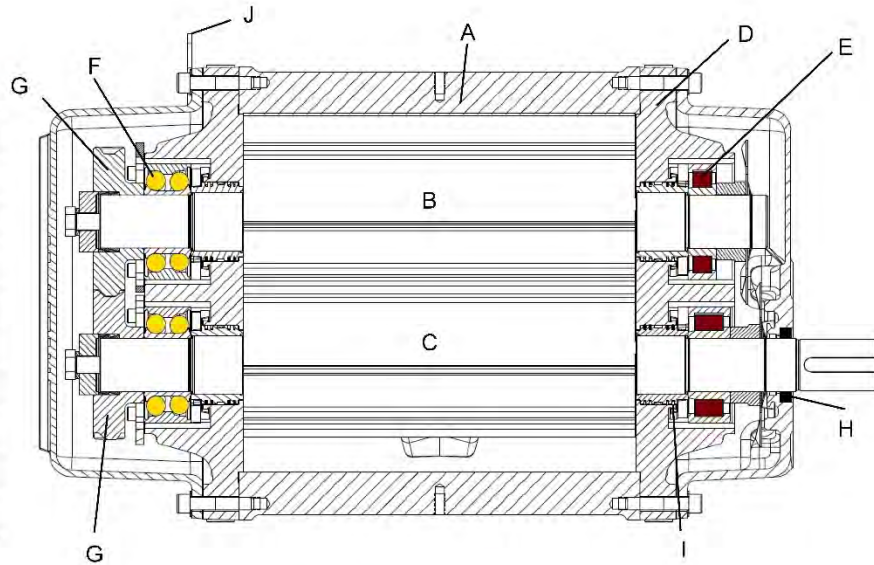


**Cleaner**  
**Lower running costs**  
**Maintenance free**



## Part Description

A	Housing
B	Driven Rotor
C	Drive Rotor
D	Head Plate
E	Roller bearings
F	Boll bearings
G	Gears
H	SCP ring
I	Piston ring seals
J	Lifting lugs



## Benefits

- No oil or water cooling system
- High mechanical and volumetric efficiency
- Lifetime reliability
- 100% oil free air
- Blowers without maintenance for 40,000 hours (except oil each year).
- Interchangeability with the previous range (except VTB822.XL)
- Lifting lugs
- Option: Mounting feet

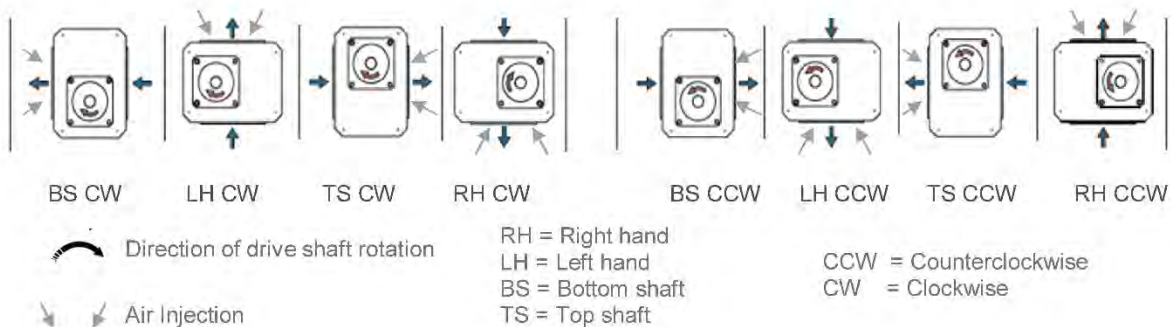
## Applications

Hibon® VTB.XL series are the only dry positive displacement blowers able to reach 95% vacuum. The special design of this «Environmentally green pump» eliminates water cooling, heat exchangers, oil consumption and effluent.

Typical applications are :

- Mobile waste handling units, industrial, municipal wet and dry.
- Pneumatic conveying (fly ash, chemicals pharmaceuticals product...).
- Central vacuum systems (packaging, envelope manufacturing...)

## Configurations





# Performances

\*\* For intermittent use only. (15 min / hour)

VTB 807.XL													
RPM	Volume displacement	50% Vacuum		60% Vacuum		70% Vacuum		80% Vacuum		87% Vacuum		90% Vacuum	
	m <sup>3</sup> /h	m <sup>3</sup> /h	kW	m <sup>3</sup> /h	kW	m <sup>3</sup> /h	kW	m <sup>3</sup> /h	kW	m <sup>3</sup> /h	kW	m <sup>3</sup> /h	kW
2600	850	598	12	538	15	452	18	177	20	-	-	-	-
2900	948	695	14	635	17	548	20	270	22	-	-	-	-
3200	1047	792	16	732	19	643	22	363	25	76	27	-	-
3500	1145	889	18	830	21	739	24	456	27	170	30	-	-
3800	1243	986	20	927	23	834	27	549	30	265	33	-	-
4000	1308	1051	21	991	25	898	28	611	31	328	35	-	-
4200	1374	1116	22	1056	26	962	29	673	33	391	37	36	38
4400	1439	1180	23	1121	27	1026	31	734	35	454	39	107	40
4600	1504	1245	24	1186	29	1089	32	796	36	518	41	178	42
4800	1570	1310	26	1250	30	1153	34	858	38	581	43	250 **	44 **



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