

Air injection Vacuum Blower VTB.XL Series

Better by design

With over 100 years of experience, Hicon 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 **hicon** 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

VTB 805.XL : Free air delivery* maxi 1028 m³/h*

VTB 807.XL : Free air delivery* maxi 1570 m³/h*

VTB 810.XL : Free air delivery* maxi 1901 m³/h*

VTB 820.XL : Free air delivery* maxi 2822 m³/h*

VTB 822.XL : Free air delivery* maxi 4636 m³/h*

Vacuum up to 95% — pressure up to 1 bar g.

* At maximum speed.

Features

Rotors: Three-Lobe Rotors with a one-piece, integral lobe and shaft design for improved quality and reliability. Available in ATEX cat.2 on request.

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.

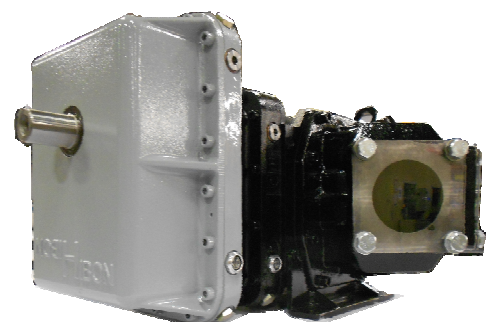
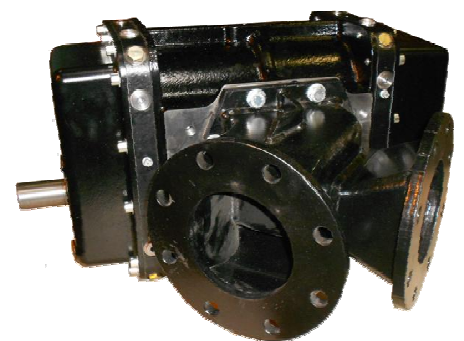
Seals: An innovative and unique design that includes 4 piston rings and a shield to insure an oil free operation.

Shaft seals: Innovative dynamic shaft seals arrangement.

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 (VTB810/VTB820)
- Lifting lugs
- Option: Mounting feet

Cleaner
Lower running costs
Maintenance free



Applications

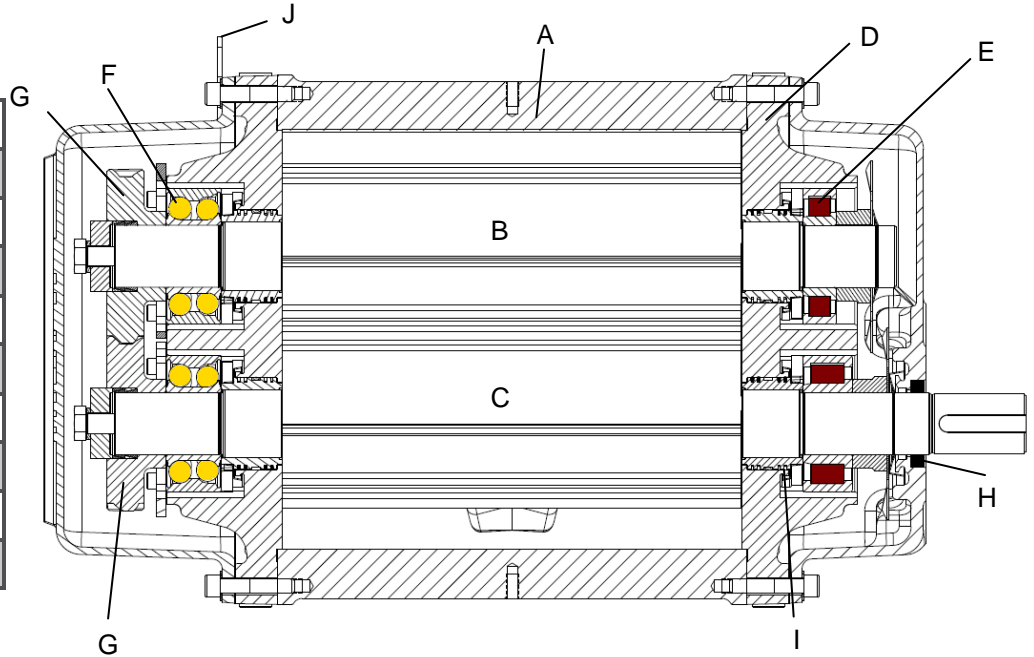
Hibon® VTB.XL series are the only dry positive displacement blowers able to reach 95% vacuum. The special design of this « Environmentally green pump » eliminates water cooling, heat exchangers, oil consumption and effluent.

Typical applications are:

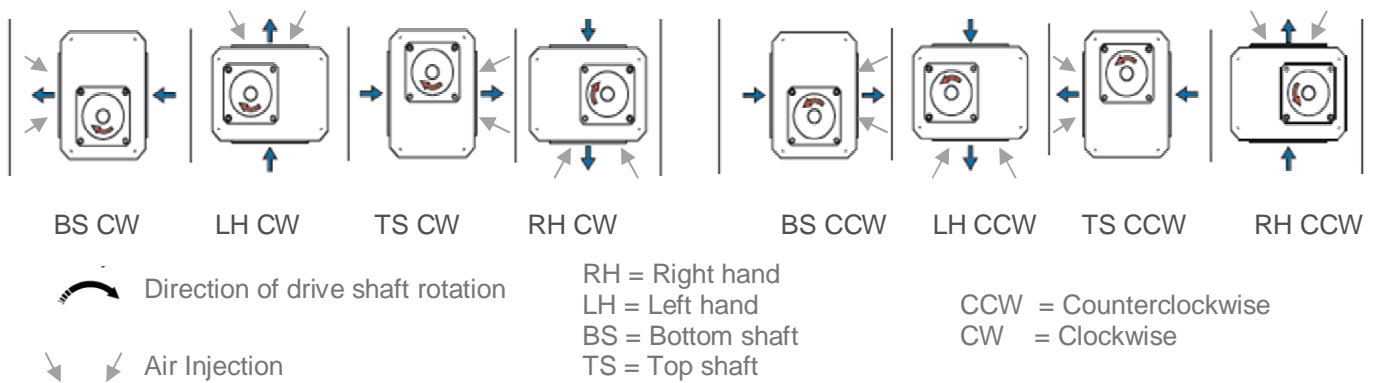
- Mobile waste handling units, industrial, municipal wet and dry
- Pneumatic conveying (fly ash, chemicals pharmaceuticals product...)
- Central vacuum systems (packaging, envelope manufacturing...)

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



Configurations



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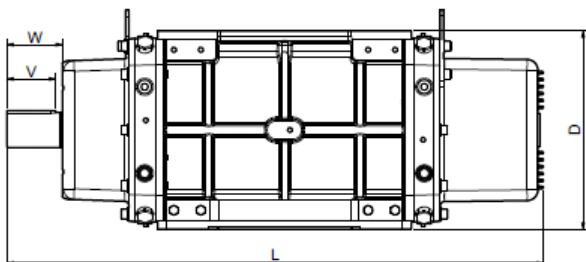
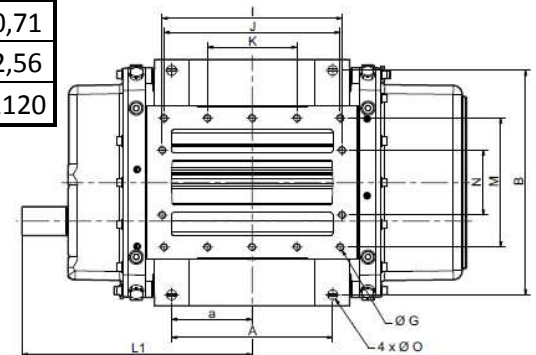
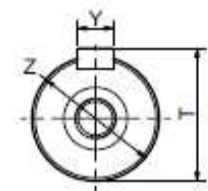
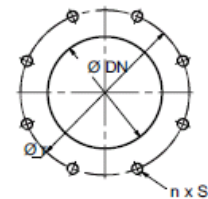
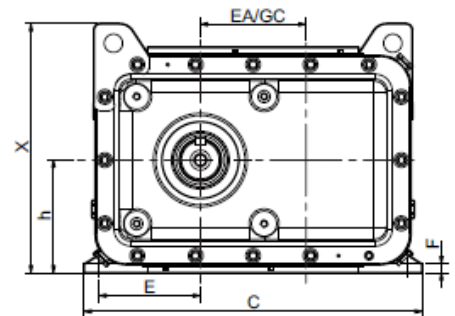
Air injection Vacuum Blower

VTB.XL Series

Dimensions (LH /RH)

	VTB 805.XL		VTB 807.XL		VTB 810.XL		VTB 820.XL		VTB 822.XL	
	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
A	/	/	/	/	/	/	/	/	360	14,17
a	/	/	/	/	/	/	/	/	180	7,09
B	/	/	/	/	/	/	/	/	505	19,88
C	346	13,62	346	13,62	425	16,73	425	16,73	554	21,81
D	252	9,92	252	9,92	310	12,20	310	12,20	370	14,57
E	/	/	/	/	/	/	/	/	166	6,54
F	/	/	/	/	/	/	/	/	15	0,59
GC	106	4,17	106	4,17	135	5,31	135	5,31	173	6,81
G	8 x M12		8 x M12		8 x M16		8 x M16		14 x M16	
h	126	4,96	126	4,96	155	6,10	155	6,10	185	7,28
I	150	5,91	198	7,80	179	7,05	230	9,06	402	15,83
J	64	2,52	120	4,72	90	3,54	100	3,94	394	15,51
K	/	/	/	/	/	/	/	/	200	7,87
L	555	21,85	650	25,59	672	26,46	792	31,18	994	39,13
L1	280	11,02	328	12,91	368	14,49	427,5	16,83	514	20,24
M	256	10,08	268	10,55	254	10,00	254	10,00	290	11,42
N	120	4,72	128	5,04	120	4,72	120	4,72	146	5,75
ØO	/	/	/	/	/	/	/	/	22	0,87
Ør	180	7,09	210	8,27	210	8,27	240	9,45	295	11,61
n x S	4 x M14		4 x M14		4 x M16		4 x M20		8 x M20	
T	45	1,77	45	1,77	51,5	2,03	51,5	2,03	69	2,72
ØDN	100	3,94	125	4,92	125	4,92	150	5,91	200	7,87
V	50	1,97	50	1,97	70	2,76	70	2,76	90	3,54
W	57	2,24	57	2,24	81	3,19	81	3,19	102	4,02
X	274	10,79	274	10,79	330	12,99	330	12,99	409	16,10
Y	12	0,47	12	0,47	14	0,55	14	0,55	18	0,71
ØZ*	42	1,65	42	1,65	48	1,89	48	1,89	65	2,56
Weight (kg/lb)	120	265	156	344	213	470	255	562	508	1120

* Fitting tolerance range : m6

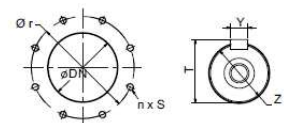
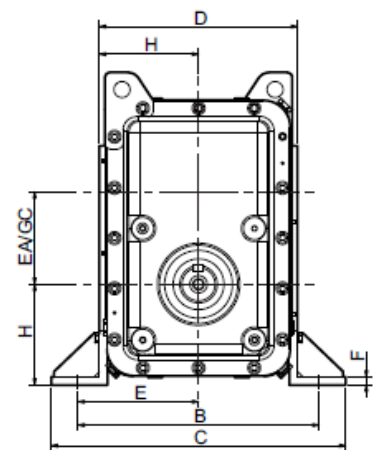
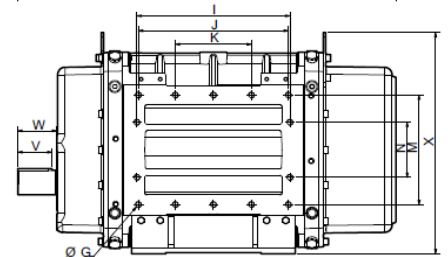
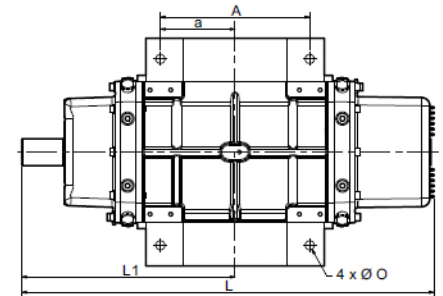


Air injection Vacuum Blower

VTB.XL Series

Dimensions (TS/BS)

	VTB 805.XL		VTB 807.XL		VTB 810.XL		VTB 820.XL		VTB 822.XL	
	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
A	128	5,04	205	8,07	185	7,28	300	11,81	360	14,17
a	64	2,52	102,5	4,04	92,5	3,64	150	5,91	180	7,09
B	316	12,44	316	12,44	370	14,57	370	14,57	450	17,72
C	362	14,25	362	14,25	418	16,46	418	16,46	550	21,65
D	252	9,92	252	9,92	310	12,20	310	12,20	370	14,57
E	158	6,22	158	6,22	185	7,28	185	7,28	225	8,86
F	10	0,39	10	0,39	10	0,39	10	0,39	15	0,59
GC	106	4,17	106	4,17	135	5,31	135	5,31	173	6,81
G	8 x M12		8 x M12		8 x M16		8 x M16		14 x M16	
H	126	4,96	126	4,96	155	6,10	155	6,10	185	7,28
h	129	5,08	129	5,08	150	5,91	150	5,91	188,5	7,42
I	150	5,91	198	7,80	179	7,05	230	9,06	402	15,83
J	64	2,52	120	4,72	90	3,54	100	3,94	394	15,51
K	/	/	/	/	/	/	/	/	200	7,87
L	555	21,85	650	25,59	672	26,46	792	31,18	994	39,13
L1	280	11,02	327,5	12,89	368	14,49	427,5	16,83	514	20,24
M	256	10,08	268	10,55	254	10,00	254	10,00	290	11,42
N	120	4,72	128	5,04	120	4,72	120	4,72	146	5,75
∅O	18	0,71	18	0,71	18	0,71	18	0,71	22	0,87
∅r	180	7,09	210	8,27	210	8,27	240	9,45	295	11,61
n x S	4 x M14		4 x M14		4 x M16		4 x M20		8 x M20	
T	45	1,77	45	1,77	51,5	2,03	51,5	2,03	69	2,72
∅DN	100	3,94	125	4,92	125	4,92	150	5,91	200	7,87
V	50	1,97	50	1,97	70	2,76	70	2,76	90	3,54
W	57	2,24	57	2,24	81	3,19	81	3,19	102	4,02
X	382	15,04	382	15,04	462	18,19	462	18,19	585	23,03
Y	12	0,47	12	0,47	14	0,55	14	0,55	18	0,71
∅Z*	42	1,65	42	1,65	48	1,89	48	1,89	65	2,56
Weight (kg/lb)	120	265	156	344	213	470	255	562	508	1120



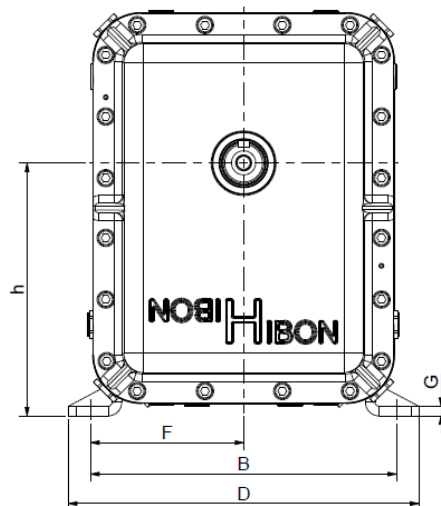
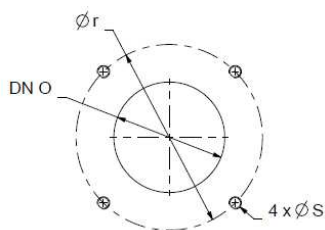
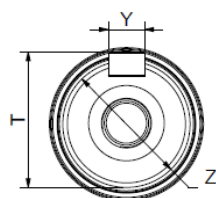
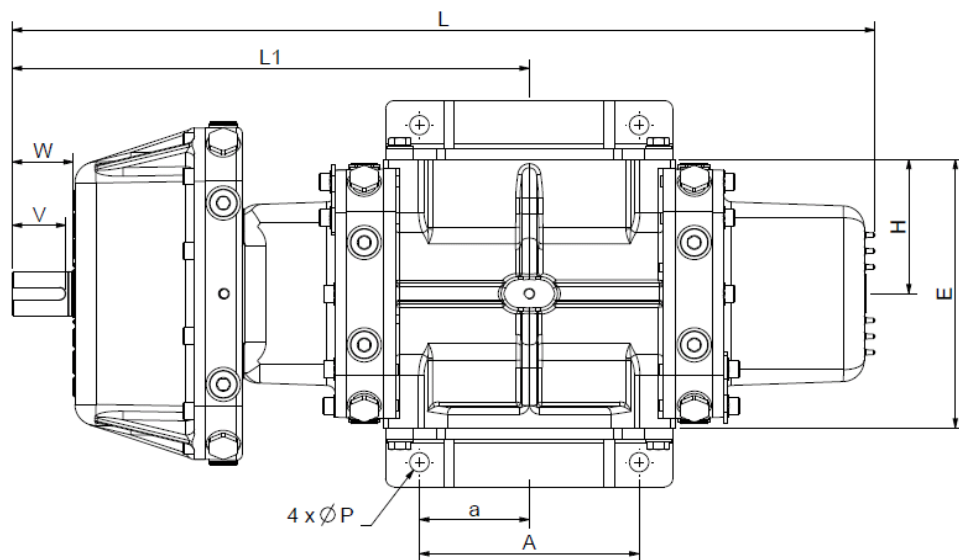
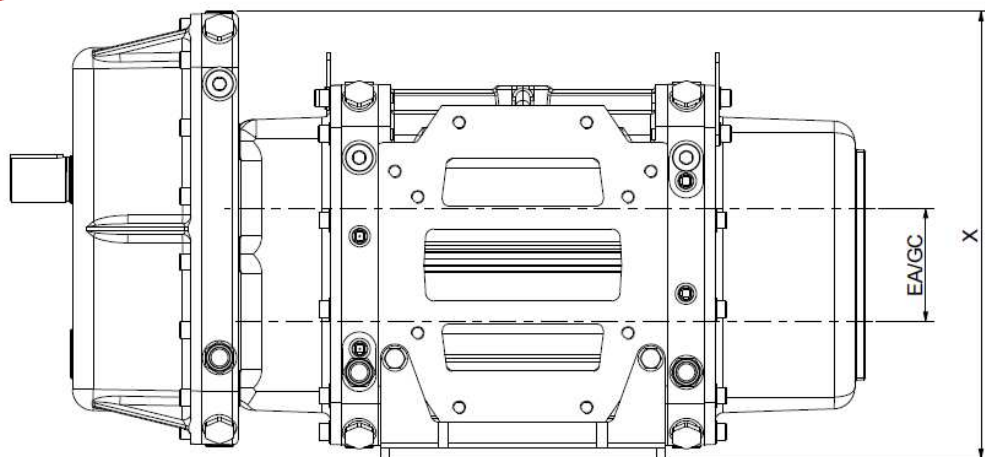
* Fitting tolerance range : m6

Air injection Vacuum Blower

VTB.XL Series

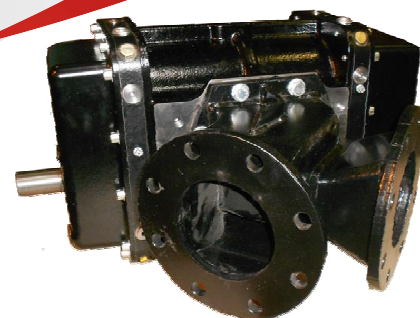
Dimensions (in mm)

	VTB 805.XL	VTB 807.XL
	With Bolt-on Gearbox	
A	128	205
a	64	102.5
B	316	316
D	362	362
E	252	252
EA	106	106
F	158	158
G	10	10
H	126	126
h	262	262
L	710	805
L1	434.5	482.5
T	45	45
V	50	50
W	57	57
X	420	420
Y	12	12
Z Ø	42	42
O Ø	100	125
P Ø	18	18
r Ø	180	210
S Ø	M14	M14
n	4	4
Weight (kg)	195	231



Air injection Vacuum Blower

VTB.XL Series



Performances

VTB 805 XL

RPM	Volume displacement	50% of vacuum		60% of vacuum		70% of vacuum		80% of vacuum		87% of vacuum		90% of vacuum	
	m ³ /h	m ³ /h	kW	m ³ /h	kW	m ³ /h	kW	m ³ /h	kW	m ³ /h	kW	m ³ /h	kW
2600	546	383	8	345	10	290	11	114	13	-	-	-	-
2900	608	446	9	408	11	351	13	173	14	-	-	-	-
3200	671	508	10	470	12	413	14	233	16	48	18	-	-
3500	734	570	11	532	14	474	16	292	17	109	19	-	-
3800	797	633	13	594	15	535	17	352	19	170	21	-	-
4000	839	674	13	636	16	576	18	392	20	210	22	-	-
4200	881	716	14	677	17	617	19	431	21	251	24	23	24
4400	923	757	15	719	18	658	20	471	22	292	25	69	26
4600	965	799	16	761	18	699	21	511	23	332	26	114	27
4800	1007	840	16	802	19	740	22	551	24	373	27	160 **	28 **

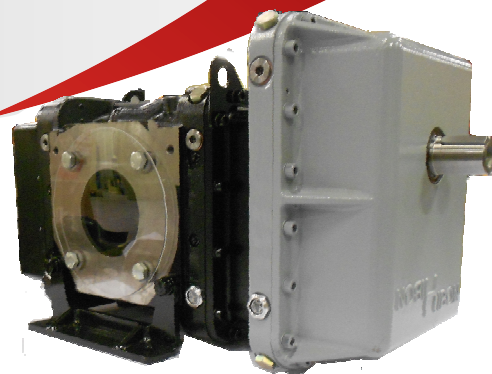
VTB 807 XL

RPM	Volume displacement	50% of vacuum		60% of vacuum		70% of vacuum		80% of vacuum		87% of vacuum		90% of vacuum	
	m ³ /h	m ³ /h	kW	m ³ /h	kW	m ³ /h	kW	m ³ /h	kW	m ³ /h	kW	m ³ /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 **

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

Air injection Vacuum Blower

VTB.XL Series



Performances

VTB 805 XL with gearbox

RPM	With gearbox RPM	Volume displacement m ³ /h	50% of vacuum		60% of vacuum		70% of vacuum		80% of vacuum		87% of vacuum		90% of vacuum	
			m ³ /h	kW	m ³ /h	kW	m ³ /h	kW	m ³ /h	kW	m ³ /h	kW	m ³ /h	kW
2600	1083	546	383	8	345	10	290	11	114	13	-	-	-	-
2900	1208	608	446	9	408	11	351	13	173	14	-	-	-	-
3200	1333	671	508	10	470	12	413	14	233	16	48	18	-	-
3500	1458	734	570	11	532	14	474	16	292	17	109	19	-	-
3800	1583	797	633	13	594	15	535	17	352	19	170	21	-	-
4000	1667	839	674	13	636	16	576	18	392	20	210	22	-	-
4200	1750	881	716	14	677	17	617	19	431	21	251	24	23	24
4400	1833	923	757	15	719	18	658	20	471	22	292	25	69	26
4600	1917	965	799	16	761	18	699	21	511	23	332	26	114	27
4800	2000	1007	840	16	802	19	740	22	551	24	373	27	160 **	28 **

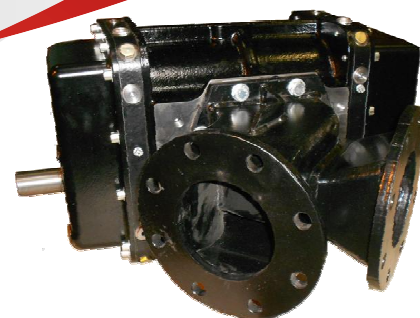
VTB 807 XL with gearbox

RPM	With gearbox RPM	Volume displacement m ³ /h	50% of vacuum		60% of vacuum		70% of vacuum		80% of vacuum		87% of vacuum		90% of vacuum	
			m ³ /h	kW	m ³ /h	kW	m ³ /h	kW	m ³ /h	kW	m ³ /h	kW	m ³ /h	kW
2600	1083	850	598	12	538	15	452	18	177	20	-	-	-	-
2900	1208	948	695	14	635	17	548	20	270	22	-	-	-	-
3200	1333	1047	792	16	732	19	643	22	363	25	76	27	-	-
3500	1458	1145	889	18	830	21	739	24	456	27	170	30	-	-
3800	1583	1243	986	20	927	23	834	27	549	30	265	33	-	-
4000	1667	1308	1051	21	991	25	898	28	611	31	328	35	-	-
4200	1750	1374	1116	22	1056	26	962	29	673	33	391	37	36	38
4400	1833	1439	1180	23	1121	27	1026	31	734	35	454	39	107	40
4600	1917	1504	1245	24	1186	29	1089	32	796	36	518	41	178	42
4800	2000	1570	1310	26	1250	30	1153	34	858	38	581	43	250 **	44 **

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Air injection Vacuum Blower

VTB.XL Series



Performances

VTB 810 XL

RPM	Volume displacement	50% of vacuum		60% of vacuum		70% of vacuum		80% of vacuum		90% of vacuum		Vacuum Max. (%)
		m ³ /h	kW	m ³ /h	kW	m ³ /h	kW	m ³ /h	kW	m ³ /h	kW	
2200	1101	908	16	855	19	778	22	571	24	164	28	92
2600	1301	1130	19	1077	23	1008	26	812	29	392	33	93,5
2800	1401	1241	21	1188	25	1123	28	932	32	506	36	94
3000	1502	1352	22	1300	27	1238	31	1052	34	620	39	94,5
3200	1602	1463	24	1411	29	1353	33	1172	37	734	42	94,8
3400	1702	1574	26	1522	31	1468	35	1292	39	848	44	95,2
3600	1802	1685	28	1633	34	1583	38	1412	42	962**	47**	
3800	1901	1796	30	1744	36	1698	41	1532**	45**	-	-	

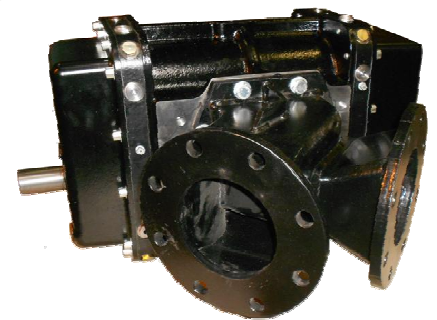
VTB 820 XL

RPM	Volume displacement	50% of vacuum		60% of vacuum		70% of vacuum		80% of vacuum		90% of vacuum		Vacuum Max. (%)
		m ³ /h	kW	m ³ /h	kW	m ³ /h	kW	m ³ /h	kW	m ³ /h	kW	
2200	1634	1237	26	1143	30	1032	34	858	36	258	40	92
2600	1931	1520	31	1433	36	1322	40	1160	43	493	47	93,5
2800	2080	1661	33	1577	39	1467	43	1311	47	611	51	94
3000	2228	1802	36	1722	41	1613	46	1463	50	729	55	94,5
3200	2377	1943	38	1867	44	1758	50	1614	54	846	59	94,8
3400	2526	2085	41	2012	47	1903	53	1765	58	964	63	95,2
3600	2674	2226	44	2156	50	2048	56	1916	62	1082**	67	
3800	2822	2367	46	2301	52	2193	60	2067**	65**	-	-	

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

Air injection Vacuum Blower

VTB.XL Series



Performances

VTB 822 XL											
RPM	Volume displacement m ³ /h	50% of vacuum		60% of vacuum		70% of vacuum		80% of vacuum		90% of vacuum	
		m3/h	kW	m3/h	kW	m3/h	kW	m3/h	kW	m3/h	kW
		1600	2472	1930	36	1784	43	1541	50	1175	57
1800	2781	2235	40	2091	48	1852	56	1455	64	955	72
2000	3090	2541	45	2398	54	2163	63	1735	71	1208	80
2200	3399	2847	49	2706	59	2474	69	2015	79	1428	88
2400	3708	3152	54	3013	64	2785	75	2295	86	1648	96
2600	4017	3458	58	3320	70	3095	81	2575	93	1868	105
2800	4326	3764	63	3628	75	3406	88	2855	100	2088	113
3000	4635	4070	67	3935	80	3717	94	3135	107	2308	121

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

Blower model	Shaft position	Rotation direction	Standard blowers			
			Without Feet		With Feet	
VTB 805.XL	Bottom	Counter clockwise	F014 570 110	E	F0145 701 101	E
	Bottom	Clockwise	F014 570 111	A	F0145 701 111	A
	Left	Counter clockwise	F014 570 100	H		
	Left	Clockwise	F014 570 101	D		
	Top	Counter clockwise	F014 570 120	F	F0145 701 201	F
	Top	Clockwise	F014 570 121	B	F0145 701 211	B
	Right	Counter clockwise	F014 570 130	G		
	Right	Clockwise	F014 570 131	C		
VTB 807.XL	Bottom	Counter clockwise	F014 690 110	E	F0146 901 101	E
	Bottom	Clockwise	F014 690 111	A	F0146 901 111	A
	Left	Counter clockwise	F014 690 100	H		
	Left	Clockwise	F014 690 101	D		
	Top	Counter clockwise	F014 690 120	F	F0146 901 201	F
	Top	Clockwise	F014 690 121	B	F0146 901 211	B
	Right	Counter clockwise	F014 690 130	G		
	Right	Clockwise	F014 690 131	C		
VTB 810.XL	Bottom	Counter clockwise	F015 690 110	E	F0156 901 101	E
	Bottom	Clockwise	F015 690 111	A	F0156 901 111	A
	Left	Counter clockwise	F015 690 100	H		
	Left	Clockwise	F015 690 101	D		
	Top	Counter clockwise	F015 690 120	F	F0156 901 201	F
	Top	Clockwise	F015 690 121	B	F0156 901 211	B
	Right	Counter clockwise	F015 690 130	G		
	Right	Clockwise	F015 690 131	C		
VTB 820.XL	Bottom	Counter clockwise	F015 570 110	E	F0155 701 101	E
	Bottom	Clockwise	F015 570 111	A	F0155 701 111	A
	Left	Counter clockwise	F015 570 100	H		
	Left	Clockwise	F015 570 101	D		
	Top	Counter clockwise	F015 570 120	F	F0155 701 201	F
	Top	Clockwise	F015 570 121	B	F0155 701 211	B
	Right	Counter clockwise	F015 570 130	G		
	Right	Clockwise	F015 570 131	C		
VTB 822.XL	Bottom	Counter clockwise	F016 570 110	E	F0165 701 101	E
	Bottom	Clockwise	F016 570 111	A	F0165 701 111	A
	Left	Counter clockwise	F16 570 100	H	F0165 701 001	H
	Left	Clockwise	F016 570 101	D	F0165 701 011	D
	Top	Counter clockwise	F016 570 120	F	F0165 701 201	F
	Top	Clockwise	F016 570 121	B	F0165 701 211	B
	Right	Counter clockwise	F016 570 130	G	F0165 701 301	G
	Right	Clockwise	F016 570 131	C	F0165 701 311	C

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