

N1B Series

Single Stage Port Plate Liquid Ring Vacuum Pump

Models: 3500, 4500, 6000, 7000, 8000, 10000



Description: Single Stage Port Plate Liquid Ring Vacuum Pump

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Vacuum Pump Capacity Range: 56,500 CFM

Max Vacuum: 25" HgV

OVERVIEW

Our **N1B Series single-stage liquid ring vacuum pumps** are engineered for deep vacuum performance in demanding industrial environments. Designed for reliability and low maintenance, the N1B Series serves industries such as **chemical, pharmaceutical, power generation, and environmental processing**. The N1B Series is factory performance tested and includes a 1-year warranty against manufacturing defects.

DESCRIPTION

NES N1B Series Single-Stage Liquid Ring Vacuum Pumps are bolt-in replacements for Edwards® LR1B pumps, matching both capacity and performance. Compatible with LR1A and LR1B configurations, they offer flexible installation and reliable deep vacuum performance. With capacities from **2,300 to 56,500 CFM**, these **cast-iron units** feature **mechanical seals** and optional full stainless construction. Ideal for **chemical, power, pharmaceutical, and environmental** use, the N1B Series delivers stable operation and low maintenance. Backed by a **1-year warranty** against manufacturing defects.



FEATURES

- Bolt-in replacement for Edwards LR1B
- Low maintenance design with no internal metal-to-metal contact.
- Precision-balanced components to extend bearing life.
- Standard construction is Cast Iron.
- Optional 304 or 316 Stainless Steel construction.
- Optional factory-installed mechanical seals.
- Parts and repair kits available to fit.
- Available in bare pump, direct drive, or V-belt systems
- Factory performance tested.
- 1-year factory warranty against manufacturer's defects.

NOTES

NES Company is proud to offer the **N1B Series Single-Stage Liquid Ring Vacuum Pumps**. These units serve as bolt-in replacements for the Edwards® LR1B Series and deliver powerful, reliable performance in deep vacuum applications. With capacities up to **56,500 CFM**, the N1B Series is built to handle demanding industrial environments with minimal maintenance and maximum uptime.

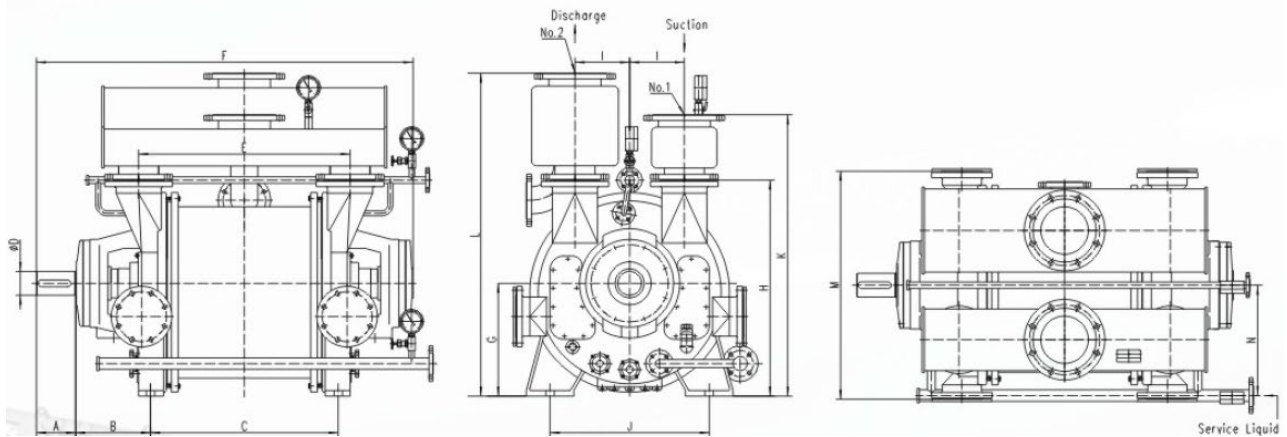
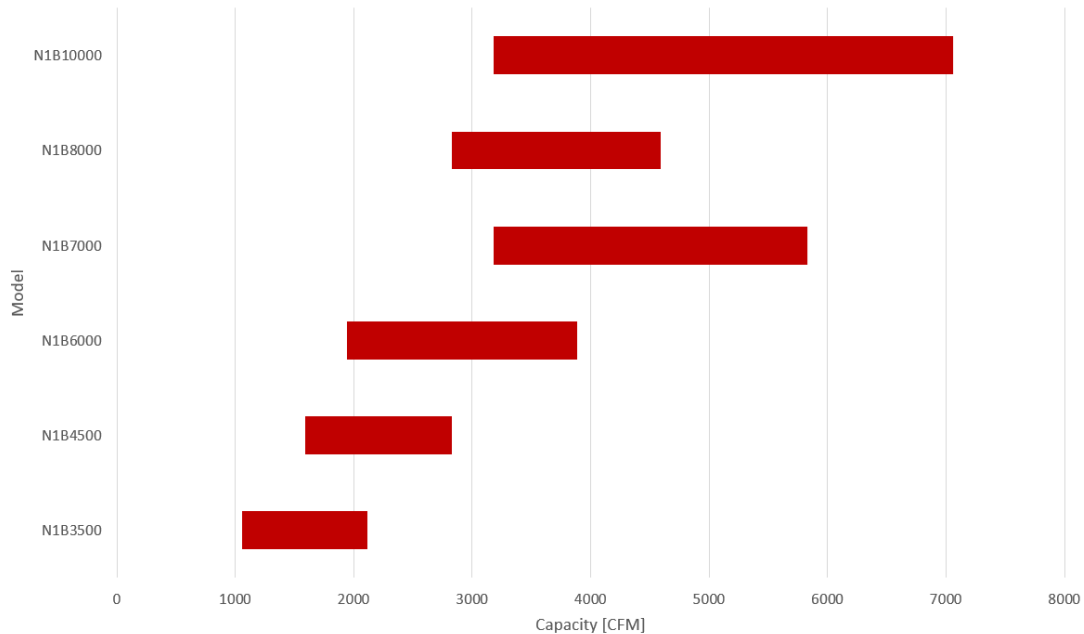
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GENERAL TECHNICAL DATA



*Dimensions in mm.

Model	A	B	C	D	E	F	I	J	K	L	M	N	No.1/No.2
N1B3500	165	315	790	100	890	1585	230	670	1185	1360	1000	465	DN200
N1B4500	165	315	990	100	1090	1785	230	670	1185	1360	1000	465	DN200
N1B6000	165	335	1150	120	1290	1985	285	800	1370	1570	1110	503	DN250
N1B7000	165	335	1300	120	1440	2135	285	800	1410	1650	1110	503	DN300
N1B8000	200	355	1110	140	1260	2020	335	950	1625	1865	1310	600	DN300
N1B10000	200	355	1110	140	1600	2360	335	950	1625	1865	1310	600	DN300

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Variation Table

Variations	Particulars
Metallurgy	Standard Cast Iron
	Stainless Steel 304
	Stainless Steel 304L
	Stainless Steel 316L
	Duplex Steel
	Titanium
	Hastelloy
	20# Alloy Steel
Direction	Clockwise
	Counter- Clockwise Rotation
Purpose	Vacuum Pump
Sealing	Standard Available as Gland Packing
	Available with Single Seal
	Available with Single Cartridge Seal
	Available with Dual Cartridge Seal and Seal Pot
Configuration	Once Through
	Partial Recovery
	Full Sealant Recovery
Other System Configuration	Simplex
	Duplex
	Triplex
	Quadruplex

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Application table

Applications
Vapor Recovery
Filtration
Degassing
Evacuation
Evaporation
Distillation
Work Holding
Priming
Conveying

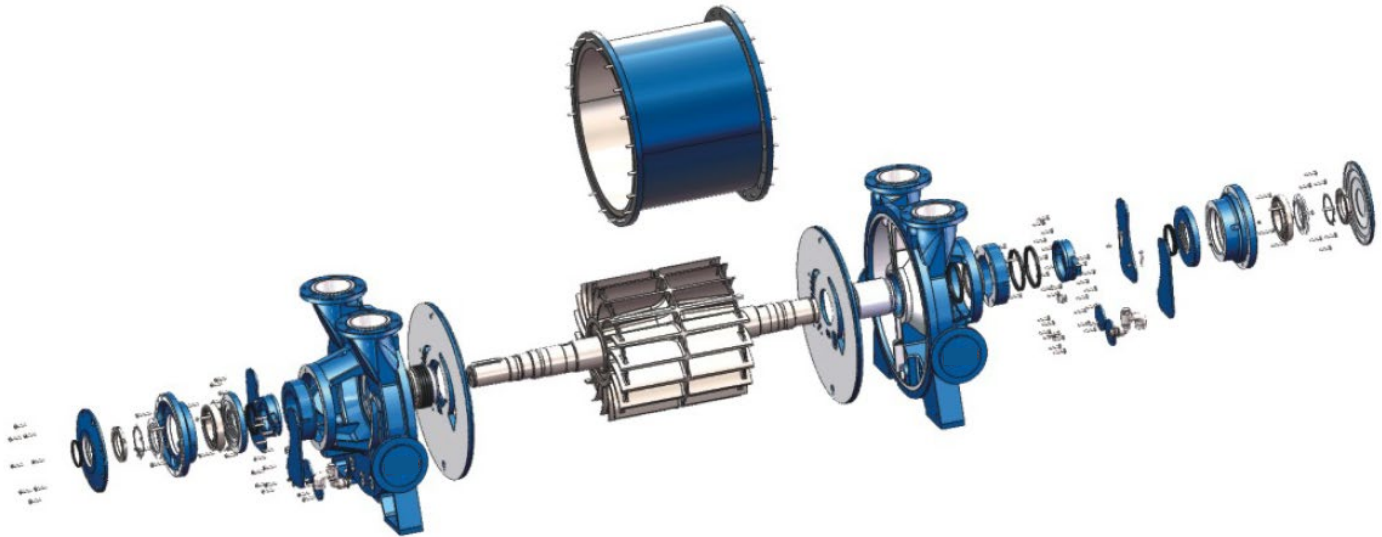
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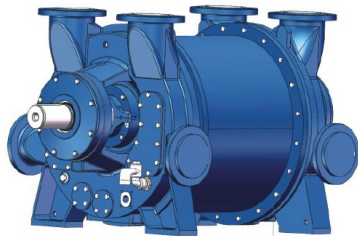
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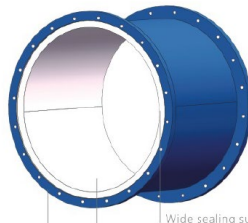
Exploded View



CHARACTERISTICS OF FLANGE STRUCTURE PUMP

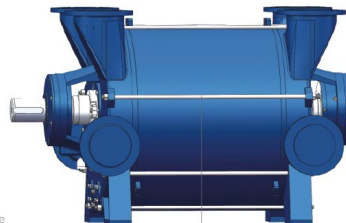


The pump casing and end shield have flanges



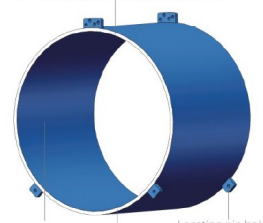
Wide sealing surface
Cavity finish machining
Finish machining of locating circular rabbet

CHARACTERISTICS OF TIE BAR STRUCTURE PUMP



Fix it with 8 tie bars, and there is no
flange on the pump casing and end shield.

No machining of locating circular rabbet



The inner cavity is usually
not machined
Locating pin hole
Narrow sealing surface