

# NPV Series

## Liquid Ring Vacuum Pumps



Models: NPV1/2-62160, NPV1/2-62240, NPV1/2-72200, NPV1/2-72300, NPV1/2-72400, NPV1/2-82350, NPV1/2-82450, NPV1/2-82550, NPVE-2750, NPVE-2950, NPVE-21200, NPVE-21850, NPVE-22500

**Description:** Two-Stage Liquid Ring Vacuum Pump

**Type:** Port Plate

**Models:** NPV1/2-62160, NPV1/2-62240, NPV1/2-72200, NPV1/2-72300, NPV1/2-72400, NPV1/2-82350, NPV1/2-82450, NPV1/2-82550, NPVE-2750, NPVE-2950, NPVE-21200, NPVE-21850, NPVE-22500

**Power Range:** 20 - 100 HP

**Capacity Range:** 160 - 2943 CFM

**Max Vacuum:** 28.5" HgV

### OVERVIEW

The NPV Series models were designed to be bolt-in replacements of Graham 1PV and 2PV two-stage port plate liquid ring vacuum pumps, and select models were specifically designed as bolt-in replacements of the Edwards SHR Series models and Busch LB Series models. Up to 2940 CFM in capacity and 28.5"HgV in vacuum, the NPV Series was built with efficiency and reliability in mind.

### DESCRIPTION

The NPV Series is a two-stage port plate liquid ring vacuum pump series with select models designed as bolt-in replacements of popular pumps series, such as the Graham 1/2PV, the Edwards SHR, and the Busch LB Series liquid ring vacuum pumps. With simple yet thoughtful design, liquid carryover tolerance, and a variety of seals and metallurgies to select for any application, the NPV Series is one of the most versatile in the liquid ring world.



### FEATURES

- **Bolt-in replacement:** Select models are bolt-in replacements for series such as the Graham PV Series, Edwards SHR Series, and Busch LB Series liquid ring vacuum pumps.
- **Standard construction of Cast Iron:** The NPV Series is standard in cast iron with various metallurgies available for selection according to the application, offering superior corrosion resistance and increasing service life.
- **Optional factory-installed mechanical seals:** NES Company offers gland packing and an array of mechanical seals available for selection.
- **Spares and Repairs:** Spare parts and repair kits are readily available for each model of the NPV Series.
- **Various Configurations:** The NPV Series vacuum pumps are available in bare pump, direct drive, or V-belt systems like once-through, partial-recovery, and full-recovery liquid ring systems with or without ejector for boosted vacuum performance.
- **Performance Guarantee:** NES Company Inc. offers the NPV Series performance tested in-factory with a 1-year warranty against manufacturer's defects.

### NOTES

NES Company is proud to offer our NPV Series liquid ring vacuum pumps, factory-performance tested with a 1-year warranty against manufacturing defects. *NES Company is not affiliated, associated, authorized by, endorsed by, or officially connected with Graham Manufacturing Co.™, Edwards Vacuum™, or Busch Vacuum™.*

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### GENERAL TECHNICAL DATA

NPV MODEL	GRAHAM BOLT-IN	EDWARDS BOLT-IN	BUSCH BOLT-IN	MAX CFM	MAX HP	MAX "HG V	MAX RPM
NPV1-62160	1PV-62160	-	-	383	40	28.5	1750
NPV1-62240	1PV-62240	-	-	512	50	28.5	1750
NPV1-72200	1PV-72200	-	-	588	46	28.5	1175
NPV1-72300	1PV-72300	-	-	824	60	28.5	1175
NPV1-72400	1PV-72400	-	-	977	76	28.5	1175
NPV1-82350	1PV-82350	-	-	1295	98	28.5	880
NPV1-82450	1PV-82450	-	-	1500	110	28.5	880
NPV1-82550	1PV-82550	-	-	1825	135	28.5	880
NPV2-62160	2PV-62160	-	LB0526A	383	40	28.5	1750
NPV2-62240	2PV-62240	-	LB0726A	512	50	28.5	1750
NPV2-72200	2PV-72200	-	-	588	46	28.5	1175
NPV2-72300	2PV-72300	-	LB1207A	824	60	28.5	1175
NPV2-72400	2PV-72400	-	LB1507A	977	76	28.5	1175
NPV2-82350	2PV-82350	-	LB2108A	1295	98	28.5	880
NPV2-82450	2PV-82450	-	LB2508A	1500	110	28.5	880
NPV2-82550	2PV-82550	-	LB3008A	1825	135	28.5	880

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**Variation Table**

Variations	Particulars
Metallurgy	Standard Cast Iron
	Stainless Steel 304
	Stainless Steel 316
Direction	Clockwise Rotation
	Counter- Clockwise Rotation
Purpose	Vacuum Pump
Integrated Gear	Available as integrated and non-integrated
Sealing	Standard Available as Gland Packing
	Available with Single Component 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

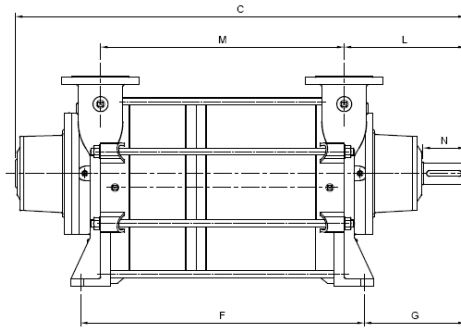
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## Liquid Ring Vacuum Pumps

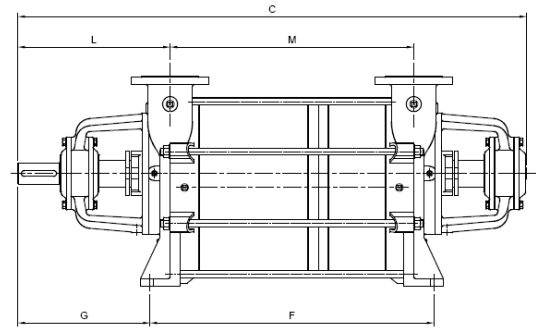
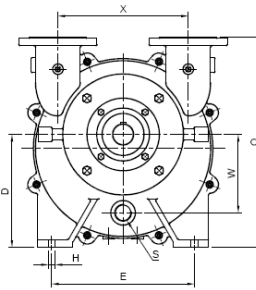
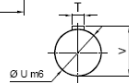
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### Vacuum Pump Length, Height, Width, Keyway, Shaft diameter



NPV2 SERIES



NPV1 SERIES

NPV Model																	IN/OUT FLANGE DETAILS ANSI B16.5#150				
	E	H	D	O	X	F	M	L	C	G	N	T	U	V	S NPT	W	NB	OD	PCD	NO HOLES	HOLE DIA
2-62160	12.6	0.87	9.84	18.31	11.42	20.59	17.32	10.67	34.88	9.06	3.35	3/8	1.75	2	1 1/4	6.1	3	7.5	6	4	0.75
2-62240	12.6	0.87	9.84	18.31	11.42	25.31	22.05	10.67	39.61	9.06	3.35	3/8	1.75	2	1 1/4	6.1	3	7.5	6	4	0.75
1-61260	12.6	0.87	9.84	18.31	11.42	20.59	17.32	13.82	41.18	12.2	3.35	3/8	1.75	2	1 1/4	6.1	3	7.5	6	4	0.75
1-62240	12.6	0.87	9.84	18.31	11.42	25.31	22.05	13.82	45.91	12.2	3.35	3/8	1.75	2	1 1/4	6.1	3	7.5	6	4	0.75
2-72200	15.75	0.87	12.6	23.43	14.57	25.83	21.46	13.39	43.78	11.3	4.72	1/2	2.25	2.5	1 1/2	8.74	4	8.98	7.5	8	0.75
2-72300	15.75	0.87	12.6	23.43	14.57	31.73	27.36	13.39	49.69	11.3	4.72	1/2	2.25	2.5	1 1/2	8.74	4	8.98	7.5	8	0.75
2-72400	15.75	0.87	12.6	23.43	14.57	35.67	31.3	13.39	53.62	11.3	4.72	1/2	2.25	2.5	1 1/2	8.74	4	8.98	7.5	8	0.75
1-72200	15.75	0.87	12.6	23.43	14.57	25.83	21.46	17.05	50.98	14.96	4.72	1/2	2.25	2.5	1 1/2	8.74	4	8.98	7.5	8	0.75
1-72300	15.75	0.87	12.6	23.43	14.57	31.73	27.36	17.05	56.89	14.96	4.72	1/2	2.25	2.5	1 1/2	8.74	4	8.98	7.5	8	0.75
1-72400	15.75	0.87	12.6	23.43	14.57	35.67	31.3	17.05	60.83	14.96	4.72	1/2	2.25	2.5	1 1/2	8.74	4	8.98	7.5	8	0.75
2-82350	20.47	0.94	16.93	31.42	19.69	41.69	33.58	19.06	65.28	15	6.3	3/4	3.125	3.5	2 1/2	11.42	6	11	9.5	8	0.875
2-82450	20.47	0.94	16.93	31.42	19.69	47.6	39.49	19.06	71.18	15	6.3	3/4	3.125	3.5	2 1/2	11.42	6	11	9.5	8	0.875
2-82550	20.47	0.94	16.93	31.42	19.69	51.54	43.43	19.06	75.12	15	6.3	3/4	3.125	3.5	2 1/2	11.42	6	11	9.5	8	0.875
1-82350	20.47	0.94	16.93	31.42	19.69	41.69	33.58	24.57	76.3	20.51	6.3	3/4	3.125	3.5	2 1/2	11.42	6	11	9.5	8	0.875
1-82450	20.47	0.94	16.93	31.42	19.69	47.6	39.49	24.57	82.2	20.51	6.3	3/4	3.125	3.5	2 1/2	11.42	6	11	9.5	8	0.875
1-82550	20.47	0.94	16.93	31.42	19.69	51.54	43.43	24.57	86.14	20.51	6.3	3/4	3.125	3.5	2 1/2	11.42	6	11	9.5	8	0.875

\*The dimensions are all in inches.

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### Application table

Applications
Turbine Condenser Evacuation
Black Liquor Evaporation
Vacuum Distillation
Vapor Recovery Unit
Boiling Processes
Central Vacuum Systems
Pneumatic Conveying
De-aerating
Timber and Textile Impregnation
Sterilizing / Autoclaves
Vacuum Filtration
Solvent Recovery
Drying Systems