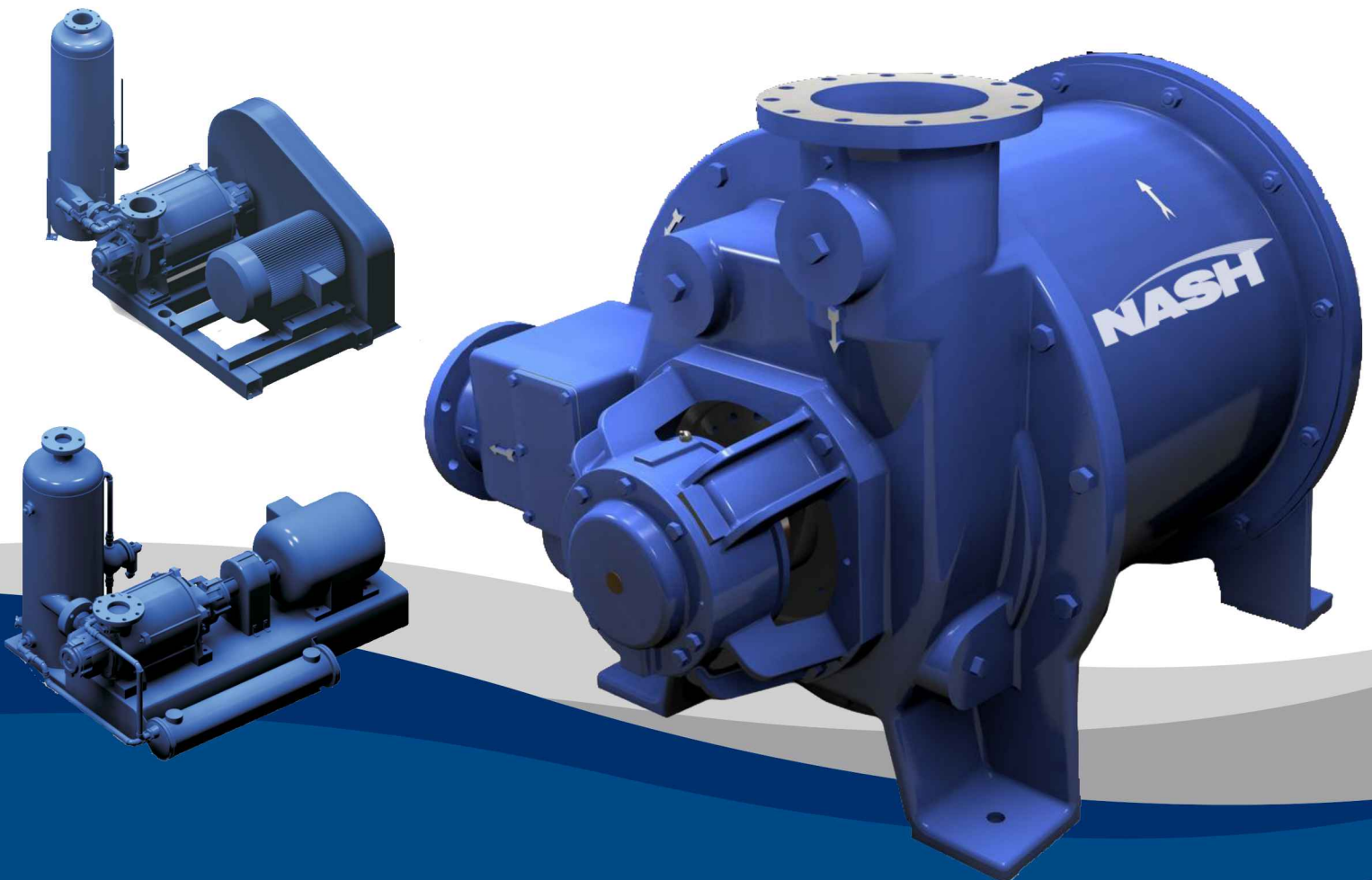


**NASH**  
by Gardner Denver

LIQUID RING PUMPS, COMPRESSORS & SYSTEMS

# VECTRA XL SERIES





## NASH VECTRA XL SERIES

### Pumps, Compressors & Systems

NASH liquid ring vacuum pumps are known as tireless workhorses, designed to stand up to the rigorous, nonstop demands of harsh industrial environments. Built better than industry standards, NASH pumps have been known for their reliability for over 110 years.

The Vectra XL series combines the highest standard of this reliability with a new level of ingenuity. Gardner Denver Nash employs advanced design technologies to achieve optimum performance and unprecedented production efficiencies. As a result, Vectra XL pumps are economical and provide great value to our customers.

Designed based on customer defined market requirements; and the input from R&D, manufacturing, marketing, and most importantly, process engineers, the Vectra XL series is a revolutionary line of pumps tough enough to be branded NASH.

**Need efficient and reliable vacuum solutions? You need NASH.**

## NASH LIQUID RING TECHNOLOGY ADVANTAGES

### Cool Running

- Safe handling of process gases

### One Moving Part

- Long term reliability

### Quiet Operation

- Improved work environment

### Handles Liquid Carryover

- Minimizes process downtime

NASH CERTIFIED™ 2-Year Performance Guarantee

## RELIABLE TECHNOLOGY FOR DEMANDING INDUSTRIAL PROCESSES

Based on over 110 years of engineering expertise, the Vectra XL series delivers patented features and design elements that only the NASH engineering team can provide.

- NASH Patented Gas Scavenging - Increased High Vacuum Performance
- Meets High Combustible Range Standards
- Precision Cast 316 Stainless Steel Mechanical Seal Standard Up to XL 150
- Improved Cone Angles - Decreased Pump Size

## PACKAGE SYSTEM SOLUTIONS

Our package system offers NASH engineered solutions in a pre-configured design for fast turnaround, and delivery in as little as 6 weeks\*.

- Pre-engineered Solutions
- Quick Delivery
- Configured to Meet the Demands of a Wide Range of Industrial Applications
- Plug & Play Installation

## CERTIFICATIONS

Vectra XL pumps meet high combustible range standards and are ATEX certified. These vacuum pumps and compressors are in accordance with guideline 94/9/EG, category 1 and 2 and were also designed with API 681 specifications in mind.

## DEPENDABLE & EFFICIENT PERFORMANCE FOR A WIDE RANGE OF INDUSTRIAL APPLICATIONS

### HIGH VACUUM

- Bottling
- Central Vacuum Systems
- Chucking
- Deaeration/Degassification
- Distillation
- Ethanol Evaporation
- Evisceration
- Fiber Molding
- House Vacuum
- Packaging
- Paper Converting
- Poultry Processing
- Wood Treatment

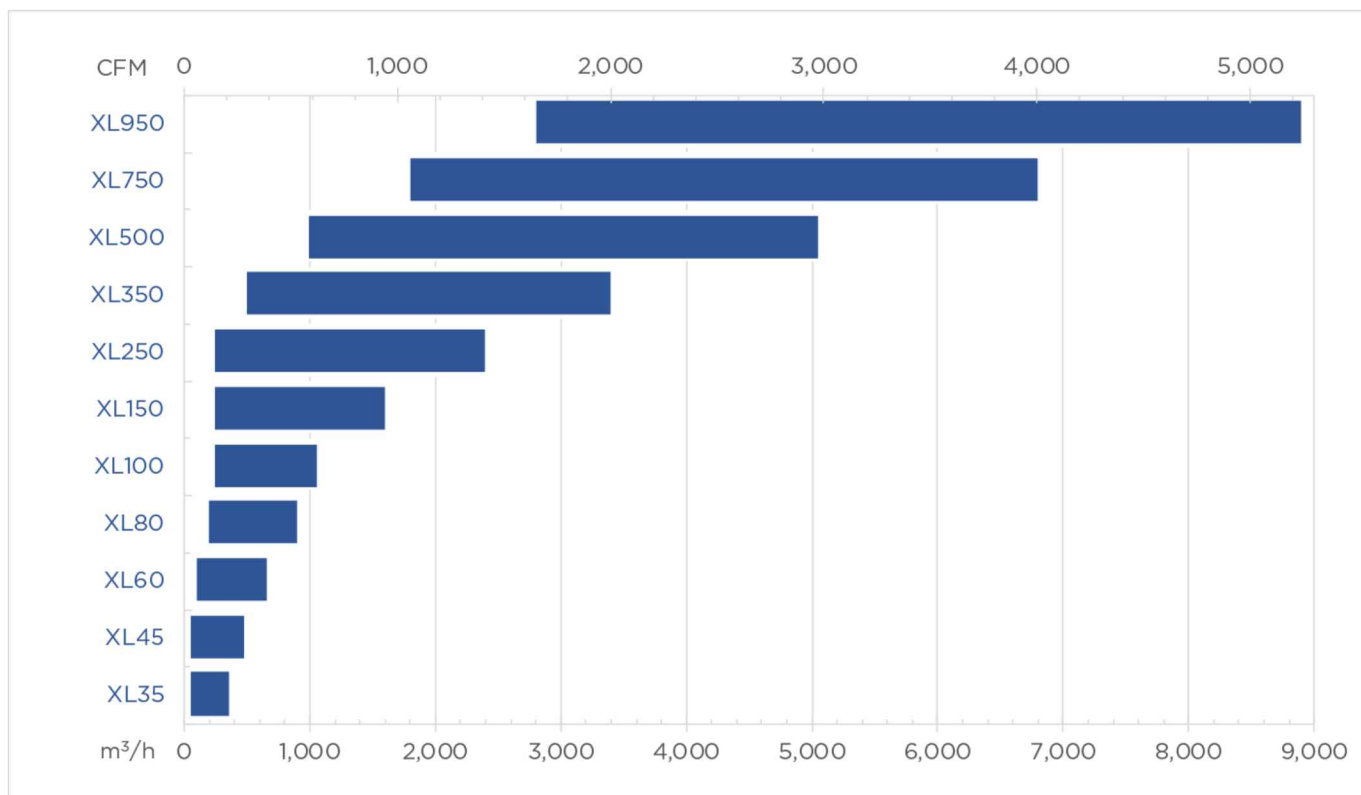
### COMPRESSOR

- Wastewater Treatment
- Digester Gas
- Aeration
- Gas Boosting



## VECTRA XL LIQUID RING VACUUM PUMPS & COMPRESSORS

INDUSTRIES & APPLICATIONS	designed to stand up to harsh environments found in a wide range of industries
MATERIALS OF CONSTRUCTION	ductile iron, stainless steel & aluminum bronze
TECHNOLOGICAL ADVANCEMENTS	patented cone design & rotor configuration
DESIGN SPECIFICATIONS	designed to excel in applications requiring discharging against positive back pressure



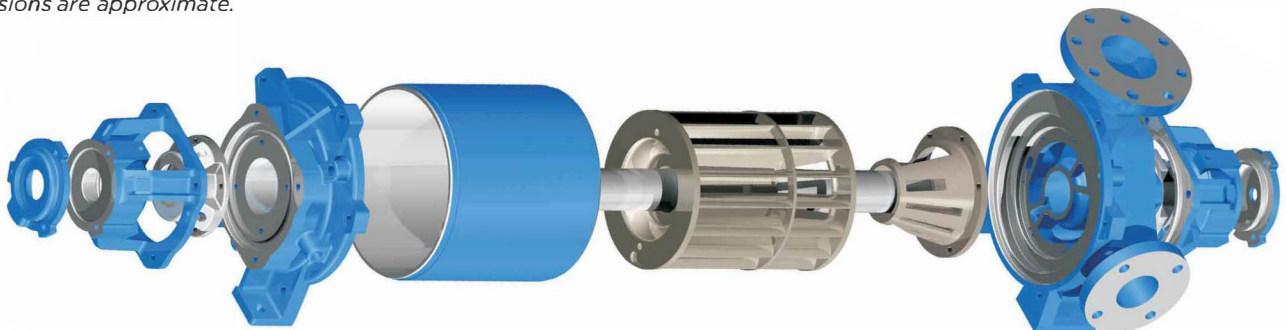
PERFORMANCE	SPECIFICATIONS
VACUUM RANGE	0-29in. Hg; to 33 mbar abs.
MECHANICAL SEAL	single, double and cartridge
DIFFERENTIAL PRESSURE	30 psi/2 bar
COMPRESSOR PRESSURE	30 psig/3 bar abs.
HYDROTEST PRESSURE	150 psig/11 bar abs. standard (225 psig/16 bar abs. optional)

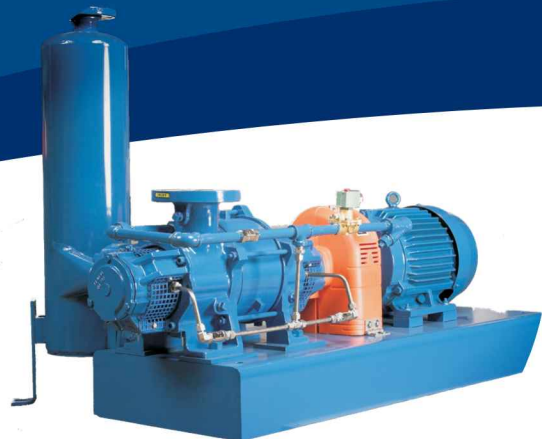


DIMENSIONS - IN INCHES (MM IN BLUE)

MODEL	LENGTH	WIDTH	HEIGHT	INLET	OUTLET
<b>XL 35</b>	30 762	13.4 340	14 356	3 FLG 80 FLG	3 FLG 80 FLG
<b>XL 45</b>	33 838	13.4 340	14 356	3 FLG 80 FLG	2 FLG 50 FLG
<b>XL 60</b>	36 914	17 432	16 406	4 FLG 100 FLG	3 FLG 80 FLG
<b>XL 80</b>	39 991	17 432	16 406	4 FLG 100 FLG	3 FLG 80 FLG
<b>XL 100</b>	42 1067	19 483	20 508	4 FLG 100 FLG	4 FLG 100 FLG
<b>XL 130</b>	46 1168	19 483	20 508	4 FLG 100 FLG	4 FLG 100 FLG
<b>XL 150</b>	48 1219	21 533	21 533	6 FLG 150 FLG	4 FLG 100 FLG
<b>XL 250</b>	55 1397	26 660	25 635	6 FLG 150 FLG	6 FLG 150 FLG
<b>XL 350</b>	64 1626	29 737	31 787	8 FLG 200 FLG	6 FLG 150 FLG
<b>XL 500</b>	81 2057	39 991	41 1041	10 FLG 250 FLG	8 FLG 200 FLG
<b>XL 750</b>	81.5 2070	49 1244	47.3 1200	10 FLG 250 FLG	8 FLG 200 FLG
<b>XL 950</b>	89.5 2273	55.4 1407	53.5 1360	12 FLG 300 FLG	10 FLG 250 FLG

**XL950 Weights** IRON 8,572 lbs SS 9,858 lbs (INFO RECEIVED FROM JEREMY AT GARDNER DENVER NASH)  
*All dimensions are approximate.*





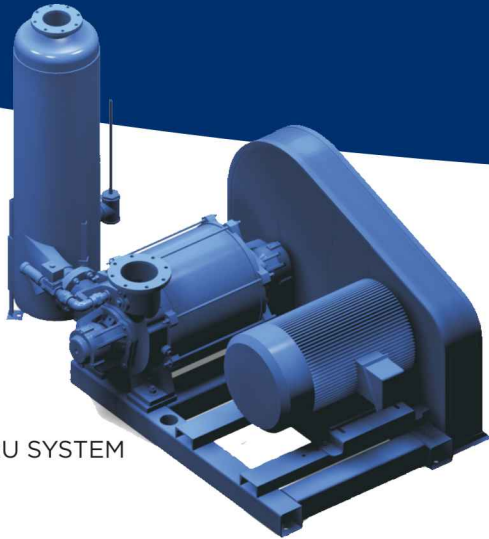
## NASH VECTRPAK STANDARD & CONFIGURED-TO-ORDER PACKAGES

- **Quick Delivery** - delivery in 6 weeks\*
- **Plug & Play** - quick installation
- **System Options** - once-thru, fully recirculated
- **Materials of Construction** - iron, stainless steel
- **Vacuum Levels** - to 29in. Hg (to 33 mbar abs.)
- **Additional Option** - Oil Sealed Packages

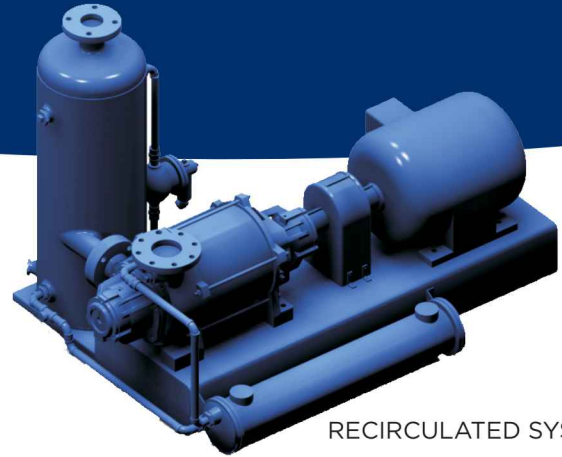
\*Depending on Pump Stock & Availability

SYSTEM OPTIONS	ONCE-THRU	FULLY RECIRCULATED
High Vacuum Flow Controls	X	X
Inlet Check Valve	X	X
Inlet Isolation Valve	X	X
Mechanical Seals (Standard for Stainless Steel up to XL 150)	X	X
Relief Valve	X	X
Vacuum Gauge	X	X
Flow Switch	X	
Partial Recirculated Seal	X	
Seal Line Isolation Valve	X	
Spray Nozzle	X	
Variable Speed Drive	X	X
Motor Enclosures: <ul style="list-style-type: none"> <li>• TEFC (Standard)</li> <li>• TEFC-SD</li> <li>• Explosion Proof</li> </ul>	X	X

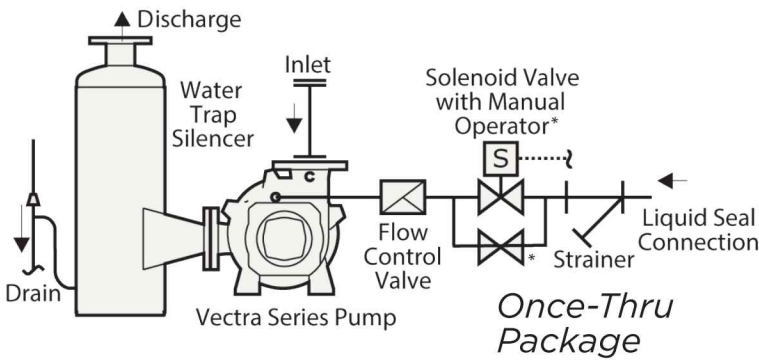
	MOUNTED PUMPS	ONCE-THRU	RECIRCULATED
Use When...	...replacing an existing system or where accessories can be reused	...contamination is not a problem and the supply of seal liquid is plentiful	...liquids and gases are hazardous or toxic and where contamination is a concern
Benefits	<ul style="list-style-type: none"> <li>• Lowest initial cost</li> </ul>	<ul style="list-style-type: none"> <li>• Simplicity</li> <li>• Low initial cost</li> </ul>	<ul style="list-style-type: none"> <li>• Low water consumption</li> <li>• Condensable inlet gases may be recovered</li> <li>• Seal liquid contained and isolated from non-hazardous coolant systems</li> </ul>
Standard Components	<ul style="list-style-type: none"> <li>• Pump</li> <li>• Base</li> <li>• Drive</li> <li>• Guard</li> <li>• TEFC motor</li> </ul>	<ul style="list-style-type: none"> <li>• Pump</li> <li>• Base</li> <li>• TEFC motor/drive/guard</li> <li>• Seal water accessories</li> <li>• Water trap silencer</li> </ul>	<ul style="list-style-type: none"> <li>• Pump</li> <li>• Base</li> <li>• TEFC motor/drive/guard</li> <li>• Seal water accessories</li> <li>• ASME-coded separator with sight glass</li> <li>• Heat exchanger</li> <li>• Automatic makeup system</li> </ul>



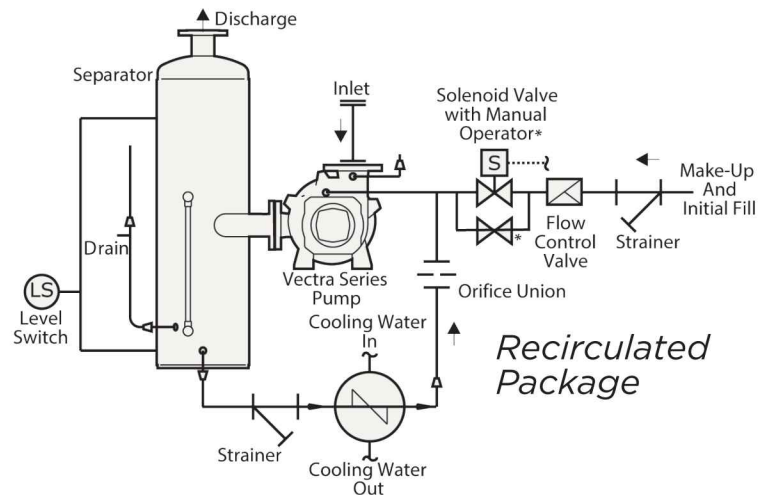
ONCE-THRU SYSTEM



RECIRCULATED SYSTEM



Once-Thru Package



Recirculated Package

\*With Manual Operator or Manual Bypass Line with Ball Valve.

FEATURES

BENEFITS

External Mechanical Seals  
(Optional on Iron, Standard on Stainless Steel up to XL 150)

Flexibility and Ease of Maintenance

Universal Stuffing Box

Accepts Variety of Mechanical Seals

Direct Drive Speeds for 60 & 50 Hz Motors

Global Product Design for Worldwide Use

Extended Pressure Ratings

Ability to handle tough applications where backpressure is required

NASH Patented Gas Scavenging

Increased High Vacuum Performance

Conical Design

Better Ability to Handle Water/Particulate Slugs

One Moving Part

Long Term Reliability

Variable Port Design

High Efficiency

Lobe Purges

Reduce Erosion Wear

Optimum Design Using Finite Element Analysis

Improved Efficiency, Performance, and Value

100% Performance Tested

Trouble-Free Start-Up & Operation

Backed by a 2-Year Warranty  
and Over 100 Years of Experience

Peace of Mind

# Gardner Denver Nash Products & Systems



## NASH® Liquid Ring Vacuum Pumps & Systems

The reliable and durable solution for demanding process applications. Through ongoing commitment to innovation, Nash continues to introduce liquid ring vacuum pumps that meet the rigors of the most demanding applications while improving efficiency and lowering total cost of ownership.



## NASH and GARO® Liquid Ring Compressors & Systems

The rugged, reliable solution for demanding process applications. Designed to handle toxic, explosive and corrosive gases, and backed by a reliable history of performance under the most demanding conditions.



## DRY-PRO® Dry Vacuum Pumps & Systems

Designed to meet your specific process needs, NASH engineered systems are ready for operation, easy to integrate into process automation, help minimize installation & operating costs, and meet the rigors of the most demanding applications.



## ENER-JET™ Ejectors & Systems

Whether on their own, or as part of a NASH ENER-JET Hybrid Vacuum System, NASH steam jet ejectors are engineered for optimum efficiency, reducing steam consumption, while maintaining their ability to handle large volumes at very high vacuum levels.