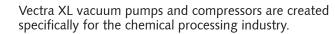
Vectra XL Liquid Ring Vacuum Pumps & Compressors





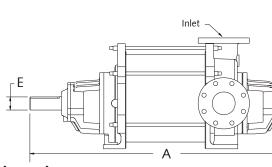
They combine the highest standard of reliability with a new level of ingenuity. Gardner Denver Nash employs advanced design technologies to achieve optimum performance and unprecedented production efficiencies.

Production efficiencies ultimately passed on to our customers in the form of unique value and unequaled performance.

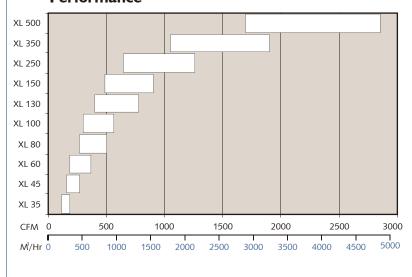
Basic specifications

Vacuum range	0-29 in Hg Vac. to 33 mbar abs.
Mechanical seals*	Single double and Cartridge
Differential pressure capability	30 psig 2 bar
Hydrotest pressure	150 psig / 11 bar abs. standard (225 psig / 16 bar abs. optional)
Construction material	Ductile iron, stainless steel

*Mechanical seals are standard on stainless steel XL 35- XL 150 models. Optional on others.



Performance



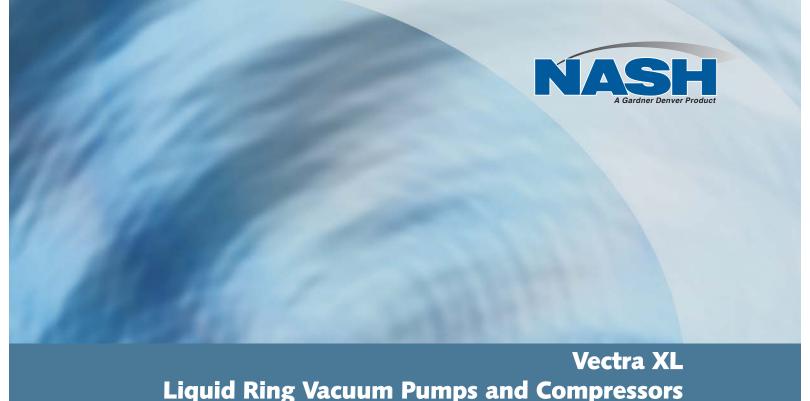
Dimensions

mm in blue

Outlet

Pump	А	В	С	D	Е	Inlet	Outlet
XL 35	30	13.4	14	6	1.5	3 in. FLG.	2 in. FLG.
	762	340	356	152	38	80mm FLG.	50mm FLG.
XL 45	33	13.4	14	6	1.5	3 in. FLG.	2 in. FLG.
	838	340	356	152	38	80mm FLG.	50mm FLG.
XL 60	36	17	16	6.8	1.9	4 in. FLG.	3 in. FLG.
	914	432	406	173	48	100mm FLG.	80mm FLG.
XL 80	39	17	16	6.8	1.9	4 in. FLG.	3 in. FLG.
	991	432	406	173	48	100mm FLG.	80mm FLG.
XL 100	42	19	20	8	2.4	4 in. FLG.	4 in. FLG.
	1067	483	508	203	61	100mm FLG.	100mm FLG.
XL 130	46	19	20	8	2.4	4 in. FLG.	4 in. FLG.
	1168	483	508	203	61	100mm FLG.	100mm FLG.
XL 150	48	21	21	9.3	2.5	6 in. FLG.	4 in. FLG.
	1219	533	533	236	64	150mm FLG.	100mm FLG.
XL 250	55	26	25	11.5	3.0	6 in. FLG.	6 in. FLG.
	1397	660	635	292	76	150mm FLG.	150mm FLG.
XL 350	64	29	31	13	3.4	8 in. FLG.	6 in. FLG.
	1626	737	787	330	86	200mm FLG.	150mm FLG.
XL 500	81	39	41	18	3.5	10 in. FLG.	8 in. FLG.
	2057	991	1041	457	89	250mm FLG.	200mm FLG.
All dimensions are approximate							

Gardner Denver Liquid Ring Pump Division



Liquid Ring Vacuum Pumps and Compressors



NASH Vectra XL Vacuum Pumps & Compressors

Industry Workhorses

NASH liquid ring vacuum pumps produced by Gardner Denver Nash have been known for more than 100 years as tireless workhorses, designed to stand up to the rigorous, nonstop demands of the harshest industrial environments. Built better than industry standards, NASH pumps are known for their reliability.

Vectra XL vacuum pumps and compressors, created specifically for the chemical process industry, combine 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 from the ground up based on customer defined market requirements; and the input from R&D, manufacturing, marketing, and most importantly, process engineers, Vectra XL pumps are a revolutionary line of pumps tough enough to be branded NASH.

These pumps include technological advancements such as a patented cone design and rotor configuration. These machines have been specifically designed to excel in applications that require discharging against a positive back pressure. 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.

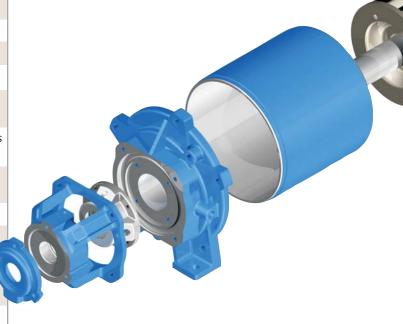
Vacuum technology for chemical processing

Vectra XL pumps are designed to stand up to the harsh environments found in the chemical process Industry. They are available in both ductile iron and stainless steel. and can accommodate a variety of mechanical seals. Key elements of the design are the improved cone angles, which decrease the size of the pump, and NASH patented Gas Scavenging Technology, which dramatically improves pump performance at high vacuum levels.

Basic specifications	
Vacuum range	0-29 in Hg vac/ to 33 mbar abs.
Mechanical seals*	Single, double and cartridge
Differential pressure capability	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)
Construction material	Ductile iron, stainless steel

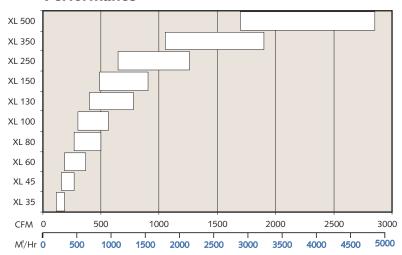
^{*}Mechanical seals are standard on stainless steel Vectra XL 35 - 150 models. Optional on others.

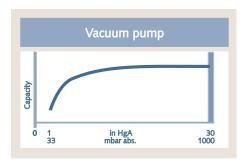
Features	Benefits
Compact design	Less floor space required
External mechanical seals	Flexibility & ease of maintenance
Universal stuffing box	Accepts variety of mech. seals
Global product design	Direct drive speeds for 60 Hz & 50 Hz motors
Extended pressure ratings	Ability to handle tough applications where back pressure is required
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
NASH patented Gas Scavenging	Increased performance at high vacuum levels
Redesigned cone angle	Reduced pump length
Optimum design using finite element analysis	Improved efficiency, performance and value
100% performance tested	Trouble-free start-up and operation

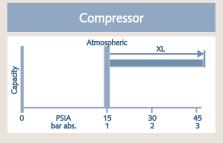


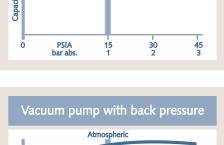
World Class Design & Performance

Performance

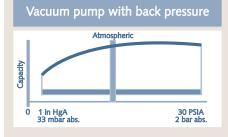


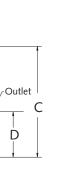




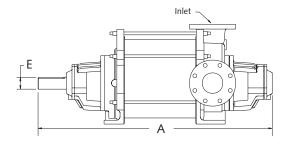








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All dimensions are approximate



Gardner Denver Nash offers vacuum pumps and compressors, engineered systems, project planning and service, all from one trusted source. With more than 100 years experience as NASH, we are the world's leading supplier of liquid ring vacuum products to meet your every need.

Other NASH Products

2BV

Compact liquid ring vacuum pumps built for serious cost savings Use up to 50 percent less water than other liquid ring pumps Monoblock and pedestal designs available Capacity of 4 to 350 CFM with vacuum to 29+" HgV Capacity of 7 to $595 \text{ m}^3/\text{h}$ with vacuum to 31 mbar abs.



GARO Compressors

Highly rugged and reliable compressors that can handle highly toxic, explosive and corrosive gases

Specifically developed for applications such as flare-gas, chlorine and Vinyl Chlorine Monomer (VCM) recovery

Capacity to 2,200 SCFM with pressure to 200PSIG Capacity of 100 to 3,400 $\rm m^3/h$ with pressures to 15 bar abs.

Single and two stage models available



2BE3/P2620

Large liquid ring vacuum pumps with superior corrosion resistance Top discharge capability which eliminates need for trench Self-recirculating seal water, reducing need for external seal water source

Capacity of 4,000 to 23,000 CFM with vacuum to 29+ " HgV Capacity of 6,800 to $39,000 \text{ m}^3/\text{h}$ with vacuum to 31 mbar abs.



TC/TCM

Integral two stage liquid ring pumps with improved performance at vacuum levels down to 0.8" HgA / 27 mbar Designed to handle large amounts of liquid carryover without difficulty

Capacity of 100 to 2,200 CFM with vacuum to 0.8" HgA Capacity of 170 to 3,740 m³/h with vacuum to 27 mbar



Steam Jet Ejectors

Sizes range from one-inch (25mm) to 78-inch (2 meters) inlets Capacities range from 20 CFM to 20,000 CFM
Capacities range from 34 m³/h to 34,000 m³/h
Multi-stage system pressures as low as 0.001 mm HgA



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