

Vectra XL
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

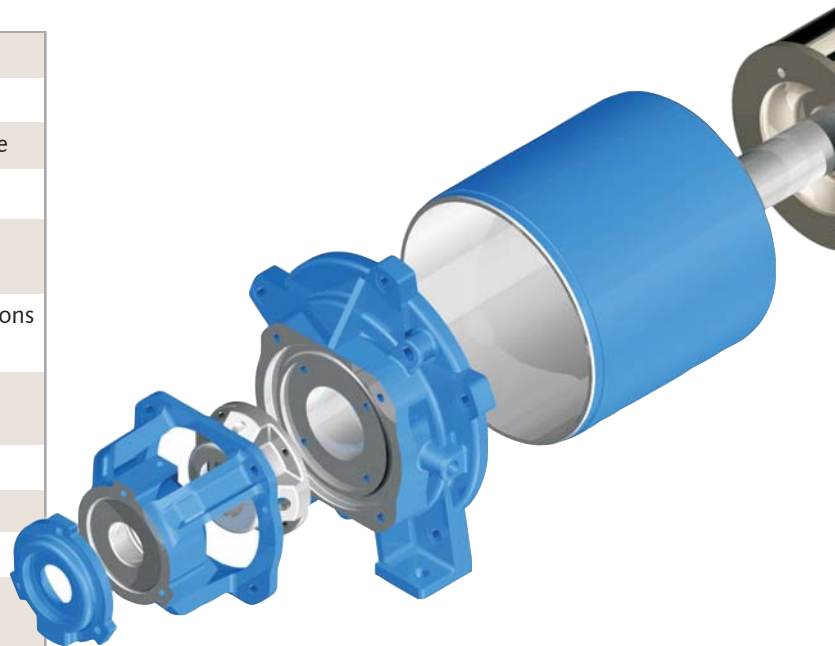
Vectra XL pumps are designed to stand up to the harsh environments found in the chemical process Industry. They are available in both ductile iron and stainless steel, and can accommodate a variety of mechanical seals. Key elements of the design are the improved cone angles, which decrease the size of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

Basic specifications

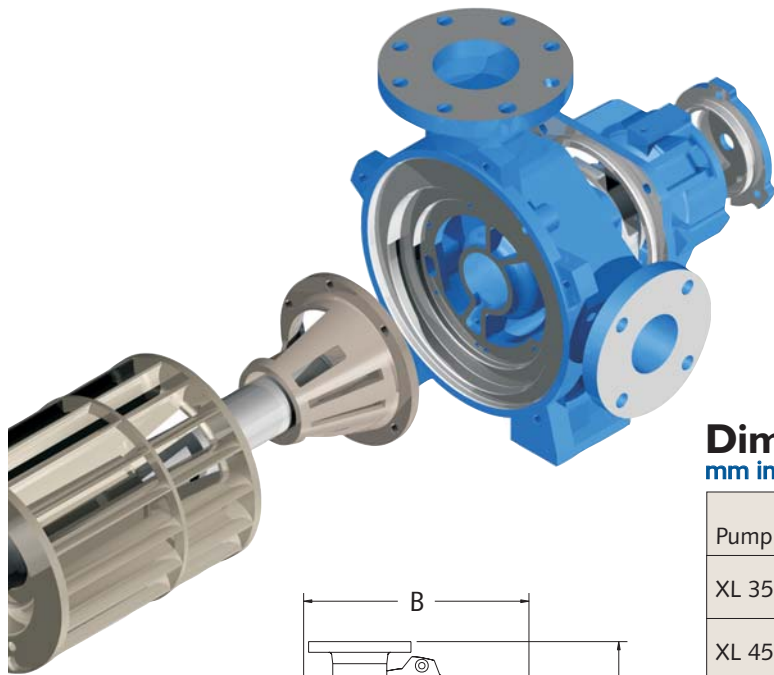
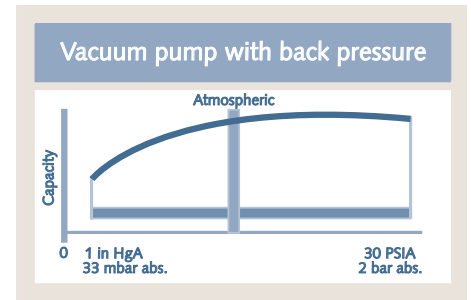
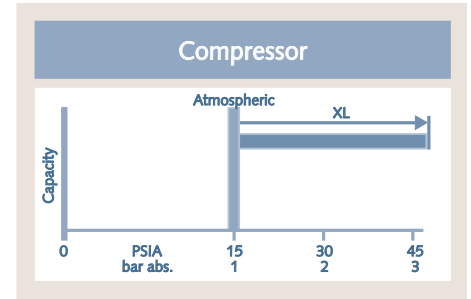
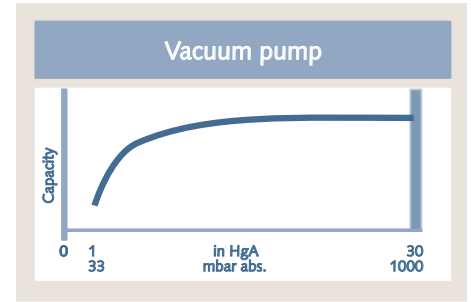
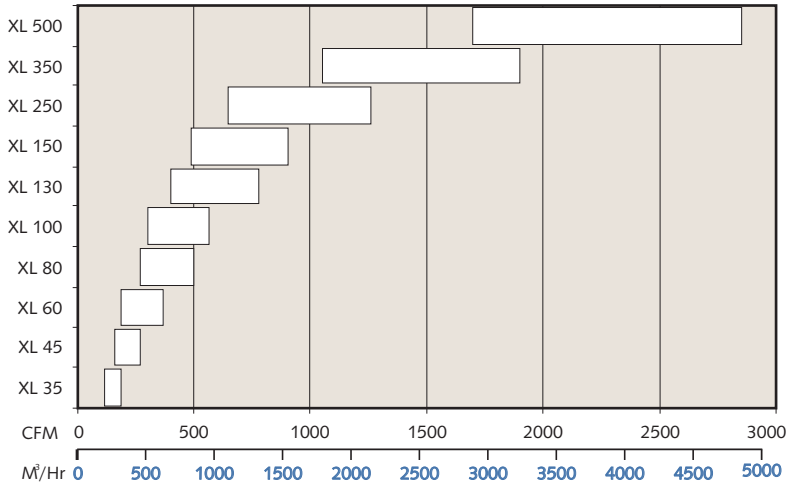
Vacuum range	0-29 in Hg vac/ to 33 mbar abs.
Mechanical seals*	Single, double and cartridge
Differential pressure capability	30 psi/ 2 bar
Compressor pressure	30 psig/ 3 bar abs.
Hydrotest pressure	150 psig/ 11 bar abs. standard (225 psig/ 16 bar abs. optional)
Construction material	Ductile iron, stainless 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



Performance

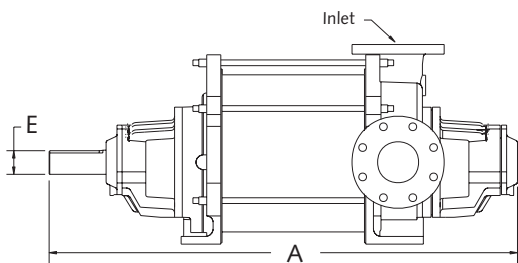
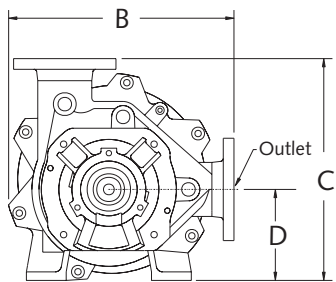


Dimensions

mm in blue

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

All dimensions are approximate



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 m³/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 m³/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 m³/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



**Gardner Denver
Liquid Ring Pump Division**
9 Trefoil Drive
Trumbull, CT 06611 U.S.A.
phone: +1 800 553 NASH
fax: +1 203 459 3988
nash@gardnerdenver.com
GardnerDenverNash.com

