

# Vectra SX Liquid Ring Vacuum Pumps and Compressors



#### A Higher Standard in Liquid Ring Pumps

NASH liquid ring pumps produced by Gardner Denver have been setting the standard in performance and reliability for over 100 years. That standard has been redefined with the Vectra SX line of small industrial vacuum pumps.

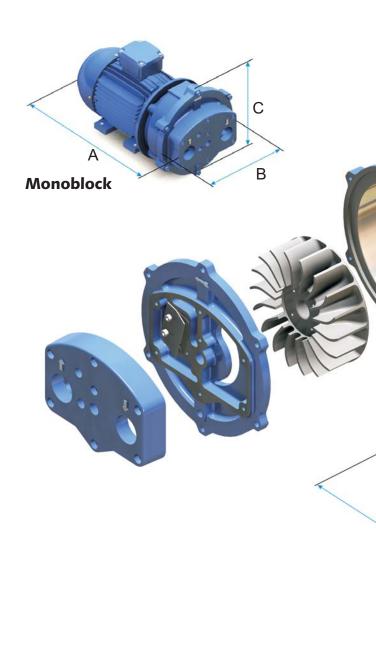
The Vectra SX series has taken the legendary NASH standard for quality and applied it to smaller equipment sizes. These pumps have been created to excel in a wide range of demanding industrial applications. Gardner Denver Nash has employed advanced design techniques such as solid modeling, finite element analysis and computational fluid dynamics, along with decades of experience, to develop a product line that delivers superior value to our customers. The result is industry leading performance, lower operating costs, and application specific configurations that target the varied requirements of demanding industrial processes.

Basic Specifications			
Vacuum range	0-29 in Hg vac to 33 mbar abs.		
Mechanical seal	Single		
Compressor pressure	0 - 20 psig to 2.3 bar abs. standard		
Construction material	<ul> <li>Cast Iron with precision cast 316SS Rotor &amp; SS lined body</li> <li>All precision cast 316 SS</li> </ul>		

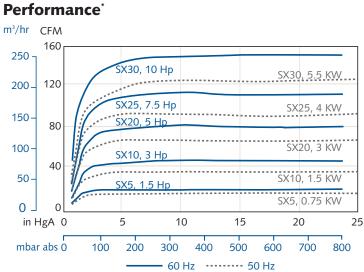
Features	Benefits
Efficient design	Lower operating costs
Global product design	Suitable for 50 & 60 Hz operation
One moving part	Long term reliability
Variable port design	High efficiency
Nash patented gas scavenging	Increased high vacuum performance
Corrosion resistant pump casing	Improved corrosion resistance
Application specific versions	Improved performance & reliability
Quiet operation	Improved work environment/safety
Built-in mechanical seal	No shaft leakage
Commercial motors used	Wider range of product configurations
100% performance tested	Trouble-free start-up and operation
Backed by a 2 year warranty and over 100 years of experience	Peace of Mind

#### Reliable Technology for Demanding Industrial Processes

Vectra SX vacuum pumps and compressors provide lower life cycle costs and greater overall value to our customers. Operating speeds have been carefully selected to ensure minimal wear, high efficiency and a long operating lifespan. Utility costs are kept to a minimum due to low water flow requirements and low power consumption. The Vectra SX has been designed so that the motor does not operate in the service factor, further extending pump life. It includes high quality components such as a precision cast 316 stainless steel rotor that is standard on all units. The cast iron pump includes a **corrosion resistant pump casing** to reduce internal corrosion and maintain peak operating performance. A **patented gas scavenging feature** has also been employed to provide superior performance and longevity at high vacuum levels.



### **World Class Design & Performance**



\*Based on 60°F (15°C) seal water

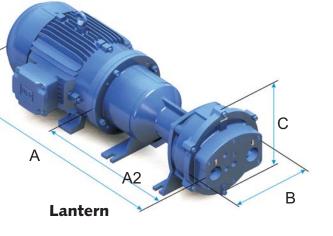
Monoblock pumps include an IEC IP55 motor: 230/460 volt, 3 phase, 60 Hz, with a 1.15 service factor. (50 Hz available upon request.)

#### **Application Specific Variations**

Variation	Applications
High Vacuum	Central vacuum systems Deaeration/Degassification Distillation Drying Evaporation Impregnation Autoclaves/Sterilization Vapor recovery Vent gas removal Laboratory vacuum Priming
Water Handling	Extrusion Evisceration Filling Filtration Vacuum conveyance Dairy Soil remediation
Compressor	Wastewater treatment Digester gas Aeration Gas boosting

#### **Dimensions - Monoblock** inches (mm in blue)

Model	Length	Width	Height
Model	А	В	С
SX5	15	8	9
	381	200	232
SX10	20	11	12
	495	267	306
SX20	22	11	12
	556	267	313
SX25	25	13	14
	639	324	364
SX30	27	13	14
3720	696	324	364



#### Dimensions - Lantern inches (mm in blue)

Model	Length	Length	Width	Height
	w/motor - A	no motor - A2	В	С
SX5	30	16	9	8
	761	414	224	205
SX10	33	19	13	12
	833	492	318	300
SX20	37	20	13	12
	933	510	318	300
SX25	40	24	16	14
	1013	602	394	347
SX30	41	24	14	14
	1029	611	367	347

All dimensions are approximate



## **Other NASH Products**

TC/TCM	Integral 2 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 2,240 CFM with vacuum to 0.8" HgA Capacity of 170 to 3,740 m <sup>3</sup> /h with vacuum to 27 mbar abs	
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 m <sup>3</sup> /h to 34,000 m <sup>3</sup> /h Multi-stage system pressures as low as 0.001 mm HgA	
2BE4/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 24" HgV Capacity of 6,800 to 39,000 m <sup>3</sup> /h with vacuum to 200 mbar abs	
Service	We have the know-how, the expertise and the specialists. We provide professional service to make your pumps run for decades. Our service centers are located in: • Australia • Brazil • China • France • Germany • Korea • Netherlands • Singapore • South Africa • Sweden • UK • USA	
Compressors	Wide range of liquid ring compressors designed for many applications. Rugged and reliable, they can handle highly toxic, explosive and corrosive gases Specifically developed for applications such as flare-gas, Chlorine and Vinyl Chlorine Monomer (VCM) recovery Capacity of 60 to 2,200 SCFM with pressure to 200 PSIG Capacity of 100 to 3,740 m <sup>3</sup> /h with pressure to 15 bar abs Single and two stage models available	

#### NASH

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