

# Priming Valves for Liquid Ring Vacuum Pumps



## **NASH Priming Valves**



### **Industry Workhorses**

Gardner Denver Nash priming valves were designed specifically to be used in Nash vacuum pump priming systems. They are extremely simple, dependable and durable. It has been proven in successful service for nearly fifty years.

### What it does

A Nash vacuum system is often used to prime one or more centrifugal pumps located above the free liquid levels of their suction sources. Vacuum draws liquid up until it fills each pump's suction line and floods its volute. This condition can be established before the pump is started up, so that it is always primed and ready to begin pumping.

#### How it works

The priming valve is a float valve. It has an open passage from all inlet connections through to the vacuum outlet connection as long as no liquid is present. When liquid enters the priming valve body, the buoyant float rises and closes the valve.

In a typical priming system, a mixture of air, gas and vapor continues to bubble up through the liquid into the priming valve body. It may come from inward air leakage, may be released from entrainment in liquid, or may vaporize from a volatile liquid. It separates out and accumulates in the priming valve body. As it does, the liquid level in the body goes down. The float drops, and it opens the valve to release the accumulation. With the release of air, gas and vapor to the vacuum system, liquid rises in the body again, and the valve closes.



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Features	Benefits
Nearly 50 years of use	Dependability
Baffled flow paths	Smooth, positive valve operation
Stem attached to float	No linkages, levers or pivots
Reversible valve plug/float	Double the usage
Bronze castings	Durability and corrosion resistance
Stainless steel guide bushing and valve seat backing plate	Durability and corrosion resistance
Additional outlets available	Flexibility in system design

	NPT Tapped Connections			Dimensions - inches		
Model	Α	В	C	D	E	F
1/2 x 3/16	1/2	3/4	1/2	5 7/8	7 3/4	1 5/8
3/4 x 5/16	3/4	1 1/4	1/2	7	10 11/16	4
1 1/4 x 9/16	1 1/4	2	3/4	9 1/4	14 3/8	5 1/2
Note: Completely dimensioned installation drawings are available from Gardner Denver Nash.						



## **Other NASH Products**

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 24" HgV Capacity of 6,800 to 39,000 m <sup>3</sup> /h with vacuum to 31 mbar abs	
Vectra	Liquid ring vacuum pumps and compressors Available in feature rich budget designs (XL or GL) Designed to handle high back pressure requirements Capacity of 115 to 2,860 CFM with vacuum to 29+ HgV Capacity of 195 to 4,860 m <sup>3</sup> /h with vacuum to 31 mbar abs	
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	
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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