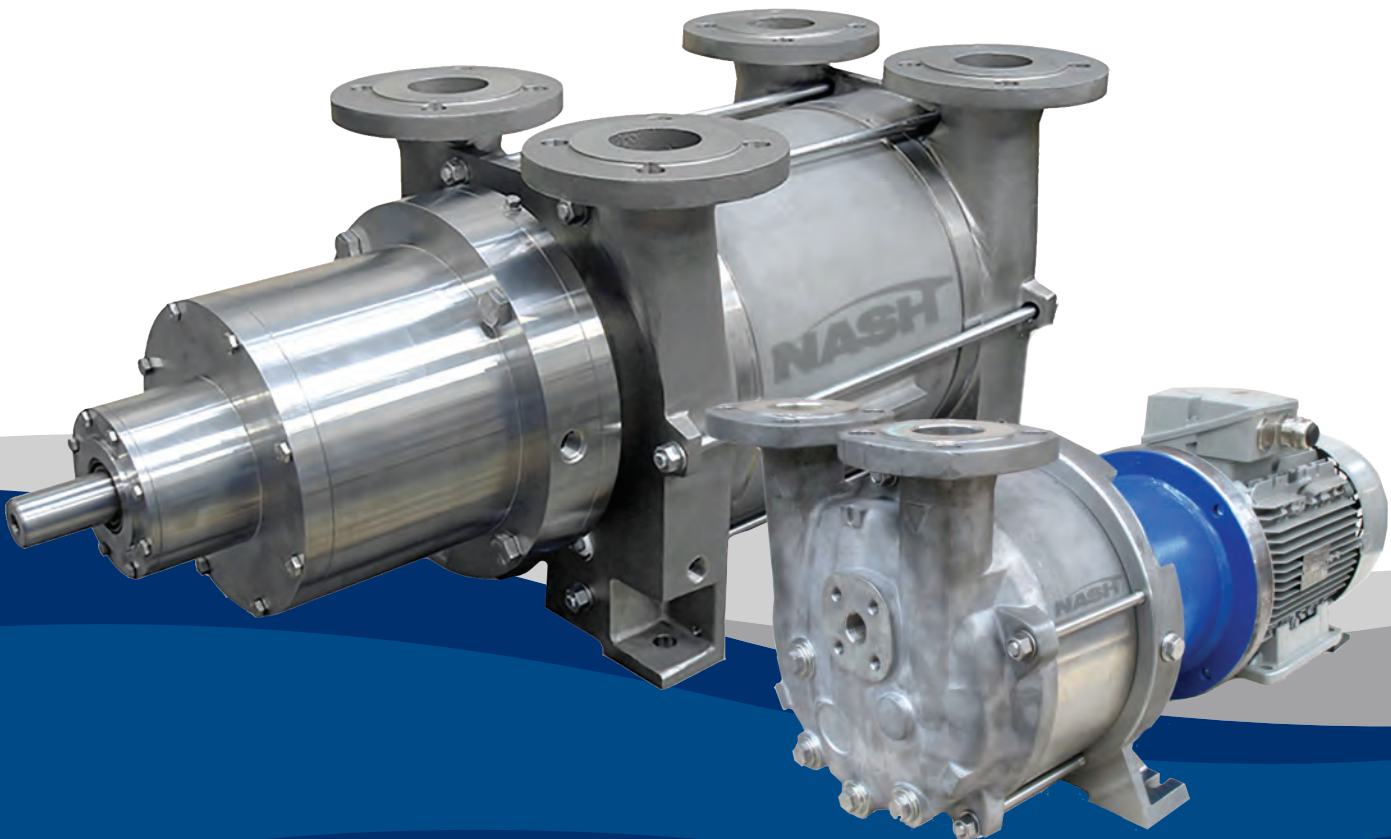




MAGNETIC DRIVEN LIQUID RING VACUUM PUMPS & COMPRESSORS

# 2BM SERIES MAG DRIVE



# NASH® 2BM Series

## Mag Drive Vacuum Pumps & Compressors

NASH Pumps are known as tireless workhorses, designed to stand up to the rigorous, non-stop demands of even the most harsh industrial environments. The NASH 2BM Series continues this tradition, with a line of magnetic driven liquid ring pumps and compressors delivering reliable, leak free performance for applications that require the highest levels of safety.

### Reliable Hydraulics

#### Proven NASH Engineering

Based on the existing NASH 2BE1 and 2BV5 pump & compressor designs, the NASH 2BM series brings proven performance and reliability to applications that require leak free performance.

### Hermetically Sealed Pump/Compressors

#### Safe Solution, No Leaks

Through a magnetic drive with static o-ring seals we achieve non-contact torque transmission which allows for the hermetic sealing. This eliminates any leakage, making the NASH 2BM Series an ideal solution for process applications that handle toxic or explosive gases or liquids, and applications that must comply with the strictest environmental regulation.

### Minimal Wear

#### Minimal Maintenance

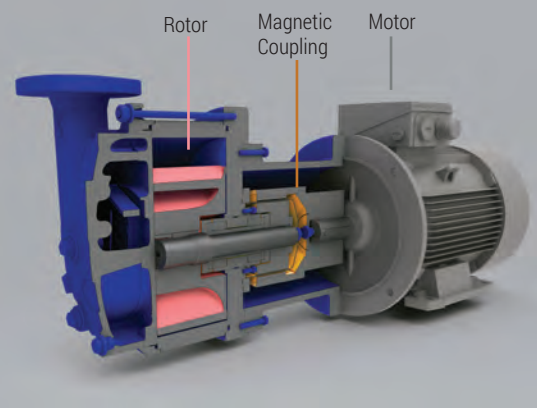
NASH 2BM Pumps & Compressors are completely enclosed and have no rotating shaft seals, eliminating wear and maintenance issues associated with mechanical seals. The pump's operating fluid is used for the lubrication and cooling of the bearings and magnetic coupling, eliminating the need for additional lubrication.

Dependable and efficient performance for a wide range of demanding applications including process industry, chemical, petrochemical, food, and other industrial applications.

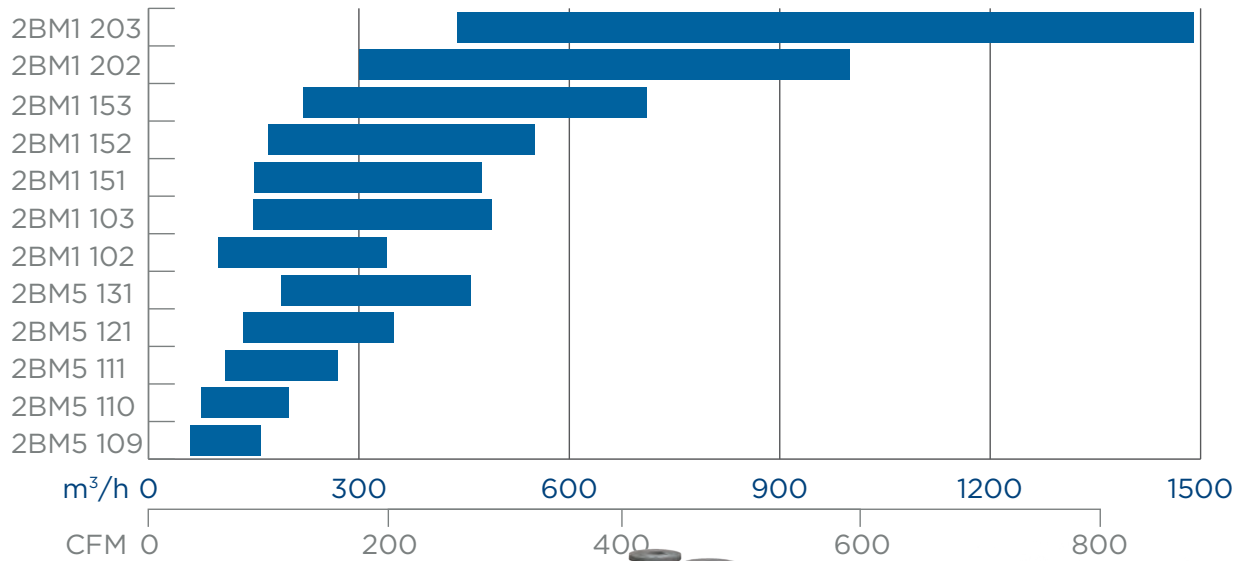
INDUSTRIES | Process Industry | Chemical & Petrochemical | Food Industry |  
 APPLICATIONS | Reaction Process | Distillation | Evaporation | Solvent Recovery | Drying |  
 | Toxic Gas & Liquid Handling | Explosive Gas Compression |

| FEATURES                                | BENEFITS                           |
|---|------------------------------------|
| SINGLE STAGE, SINGLE ACTING             | Proven design, robust construction |
| MAGNETIC DRIVE                          | Hermetically Sealed for Zero leaks |
| STATIC O-RING SEALS                     | No rotating seals                  |
| NO CONTACT OF TORQUE                    | No wear, low maintenance           |
| SEAL LIQUID LUBRICATED JOURNAL BEARINGS | No additional liquid required      |
| LARGE DIFFERENTIAL PRESSURE CAPABILITY  | Covers wide operating range        |
| HIGH HYDRO TEST PRESSURE CAPABILITY     | Safe inspection method             |

NASH 2BM5 Model Cutaway



## Vacuum Performance



## Specifications

### 2BM1



### 2BM5

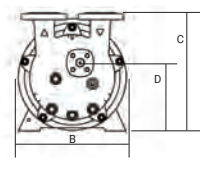
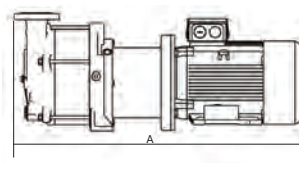
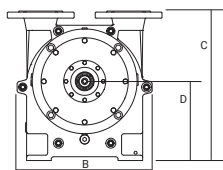
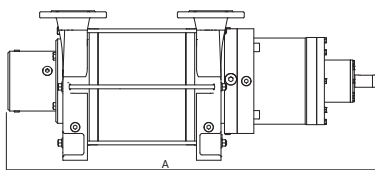


|                                  |                               |                                      |
|----------------------------------|-------------------------------|--------------------------------------|
| VACUUM RANGE                     | to 1" Hg abs. (33 mbar abs)   | to 1" Hg abs. (33 mbar abs)          |
| SEALING                          | Can/O-Ring                    | Can/O-Ring                           |
| DIFFERENTIAL PRESSURE CAPABILITY | ~20.3 psi (-1.4 bar)          | ~18.9 psi (-1.3 bar)                 |
| COMPRESSOR PRESSURE              | ~5.8 psig (-1.4 bar abs.)     | ~21.7 psig (-2.5 bar abs.)           |
| MATERIALS                        | Ductile iron, stainless steel | Ductile iron/bronze, stainless steel |
| CERTIFICATION                    | ATEX Versions Available       |                                      |

## Dimensions in | mm

| MODEL    | A             | B           | C           | D           | INLET             | OUTLET            |
|----------|---------------|-------------|-------------|-------------|-------------------|-------------------|
| 2BM1 203 | 47.0<br>1194  | 16.9<br>430 | 23.2<br>590 | 12.4<br>315 | 4" FLG<br>DN 100  | 4" FLG<br>DN 100  |
| 2BM1 202 | 42.3<br>1074  | 16.9<br>430 | 23.2<br>590 | 12.4<br>315 | 4" FLG<br>DN 100  | 4" FLG<br>DN 100  |
| 2BM1 153 | 41.2<br>1047  | 13.0<br>330 | 16.7<br>425 | 8.9<br>225  | 2.5" FLG<br>DN 65 | 2.5" FLG<br>DN 65 |
| 2BM1 152 | 38.9<br>987   | 13.0<br>330 | 16.7<br>425 | 8.9<br>225  | 2.5" FLG<br>DN 65 | 2.5" FLG<br>DN 65 |
| 2BM1 151 | 37.9<br>962   | 13.0<br>330 | 16.7<br>425 | 8.9<br>225  | 2.5" FLG<br>DN 65 | 2.5" FLG<br>DN 65 |
| 2BM1 103 | 37.0<br>940   | 8.7<br>220  | 14.0<br>355 | 7.1<br>180  | 2" FLG<br>DN 50   | 2" FLG<br>DN 50   |
| 2BM1 102 | 34.5<br>875.5 | 8.7<br>220  | 14.0<br>355 | 7.1<br>180  | 2" FLG<br>DN 50   | 2" FLG<br>DN 50   |

| MODEL    | A              | B             | C           | D            | INLET             | OUTLET            |
|----------|----------------|---------------|-------------|--------------|-------------------|-------------------|
| 2BM5 131 | 46.6<br>1184   | 17.4<br>441   | 17.0<br>432 | 10.0<br>254  | 2.5" FLG<br>DN 65 | 2.5" FLG<br>DN 65 |
| 2BM5 121 | 49.7<br>1263.5 | 16.7<br>425.0 | 16.1<br>410 | 9.5<br>242.0 | 2.5" FLG<br>DN 65 | 2.5" FLG<br>DN 65 |
| 2BM5 111 | 36.3<br>921.5  | 13.4<br>340   | 14.7<br>373 | 8.5<br>215   | 2" FLG<br>DN 50   | 2" FLG<br>DN 50   |
| 2BM5 110 | 35.3<br>897.5  | 13.4<br>340   | 14.7<br>373 | 8.5<br>215   | 2" FLG<br>DN 50   | 2" FLG<br>DN 50   |
| 2BM5 109 | 35.3<br>901.5  | 13.4<br>340   | 14.7<br>373 | 8.5<br>215   | 2" FLG<br>DN 50   | 2" FLG<br>DN 50   |



All dimensional and performance data approximate. Dimensions for complete product series available upon request. Length of the 2BM5 series dependent on motor used.

# 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® VSB Dry Screw Vacuum Pumps

The NASH® DRY-PRO® is a remarkably simple, yet sophisticated, reliable and highly efficient dry vacuum pump. NASH DRY-PRO dry vacuum pumps and systems continue this tradition, delivering proven NASH reliability, with the low maintenance requirements that industry demands.



## 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 and while maintaining their ability to handle large volumes at very high vacuum levels.



Gardner Denver Nash, LLC

200 Simko Blvd.  
Charleroi, PA 15022 USA

Tel: 1 724 239 1500

[www.GDNash.com](http://www.GDNash.com)