

NASH

**TC/TCM Series
Two Stage Liquid Ring Vacuum Pumps**



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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.

The TC/TCM pumps are manufactured to ISO 9001:2000 standards and are ATEX compliant. Our commitment to excellence and customer service extends from manufacturing and installation to technical assistance and beyond. Service and distribution centers are located throughout the world, offering quality service and support for Nash products.



Vacuum technology

The TC/TCM liquid ring vacuum pumps were created for the chemical, petrochemical and power industries as well as other high vacuum applications. They are designed to operate at very low suction pressure levels (less than 10 torr) with low vapor pressure seal liquids. In many applications, this translates into considerable operational savings by reducing the number of stages on hybrid systems. For example, a three stage jet system with glycol as motive and seal liquid can be reduced to a two stage system.

These pumps, with their integral two stage rotors, are able to condense process vapors and to recover or dispose of them. The result is a highly reliable and efficient vacuum pump.

| Basic Specifications NASH TC/TCM | |
|--|--|
| Vacuum range | to 27 mbar abs. (0.8 in HgA) |
| Mechanical seals* | Single, double and cartridge |
| Hydrotest pressure (ductile iron pumps) | 6 bar abs. (75 psig) standard |
| Hydrotest pressure (stainless steel pumps) | 12 bar abs. (150 psig) |
| Capacity | 170 to 3,740 m ³ /hr (100 to 2,200 CFM) |
| Construction material | Ductile iron, stainless steel |

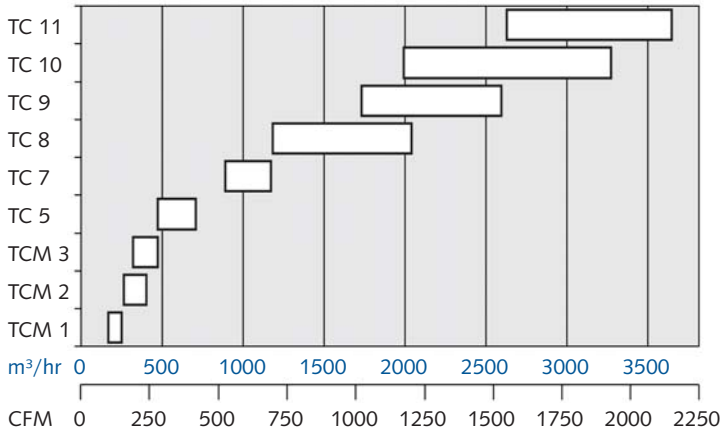
* Mechanical seals are standard on stainless steel TC(M) 1 - 8 models
Optional on others

| Features | Benefits |
|---|--|
| New, patented air/water separation design** | Improved efficiency |
| Integral two stage impeller | High reliability, can attain high vacuum without additional components |
| Shrouded rotor bades | Strength and reliability |
| Removable bearing bracket | Easier maintenance |
| O-ring and gasket sealing options** | Optimum sealing to your specifications |
| ATEX compliant | Meets today's industry standards |
| 100% performance tested | Trouble-free start-up and operation |
| 2 years warranty and over 100 years of experience | Peace of mind |

** TC 8, TC 9, TC 10 and TC 11 only

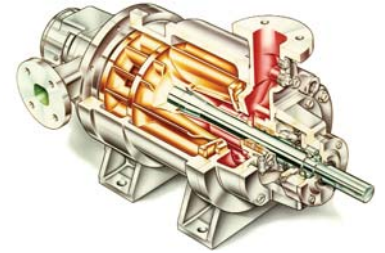
NASH TC/TCM Series World Class Design and Performance

Performance : Suction Capacity



Performance : Vacuum Range

| | | | | | | | |
|-----|-----|----------|-----|-----|-----|------|------|
| 28 | 33 | mbar abs | 100 | 160 | 200 | 500 | 1013 |
| 0.8 | 1.0 | in HgA | 2.9 | 4.7 | 5.9 | 14.7 | 30.0 |



NASH TC 1-3, NASH TC 5

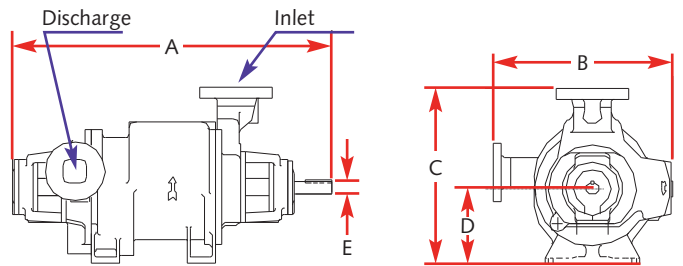


NASH TC 8

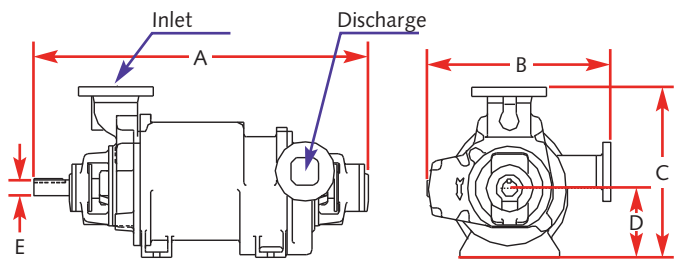
Dimensions

all dimensions are approximate; technical data subject to change

| Pump Model | A mm inches | B mm inches | C mm inches | D mm inches | E mm inches | Inlet Flange mm inches | Discharge Flange mm inches |
|------------|-------------------|-------------------|-------------------|-------------------|-------------------|------------------------------|----------------------------------|
| TC 11 | 2060 81 | 1005 40 | 1080 43 | 480 19 | 95 3.7 | 200 8 | 150 6 |
| TC 10 | 1942 76.4 | 1132 44.6 | 940 37 | 457 18 | 85 3.35 | 200 8 | 150 6 |
| TC 9 | 1862 73.3 | 1056 41.6 | 890 35 | 432 17 | 85 3.34 | 200 8 | 150 6 |
| TC 8 | 1552 61.1 | 846 33.3 | 737 29 | 356 14 | 80 3.15 | 150 6 | 100 4 |
| TC 7 | 1282 51 | 702 28 | 654 26 | 330 13 | 60 2.4 | 150 6 | 100 4 |
| TC 5 | 1022 40.3 | 572 22.5 | 559 22 | 241 9.5 | 41 1.6 | 100 4 | 80 3 |
| TCM 3 | 981 38.6 | 435 17.1 | 451 17.8 | 200 7.9 | 38 1.5 | 50 2 | 50 2 |
| TCM 2 | 937 36.9 | 435 17.1 | 451 17.8 | 200 7.9 | 38 1.5 | 50 2 | 50 2 |
| TCM 1 | 791 31.1 | 397 15.6 | 394 15.5 | 165 6.5 | 35 1.4 | 50 2 | 50 2 |



TCM 1-3, TC 5



TCM 7 - 11

Other NASH Products:

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: 6,800 to 39,000 m³/h (4,000 to 23,000 CFM)
- Vacuum: to 160 mbar abs. (25" HgV)



Vectra XL, GL

- Liquid ring vacuum pumps and compressors
- Available in feature rich budget designs (XL or GL)
- Designed to handle high back pressure requirements
- Capacity: 34 to 6,796 m³/h (20 to 4,000 CFM)
- Vacuum: to 33 mbar abs. (29" + HgV)



Vectra SX

- Liquid ring vacuum pumps and compressors
- Available in monoblock or lantern design
- Water handling version for large amounts of liquid carryover
- Capacity: 35 to 260 m³/h (20 to 155 CFM)
- Vacuum: to 33 mbar abs. (29" + HgV)



Service for Liquid Ring Pumps

We have the know-how, the experience and the specialists: We provide professional service to keep your pumps running and efficient for decades. Our Service Centers are located in:

- Australia
- Brazil
- China
- Germany
- Korea
- The Netherlands
- Singapore
- South Africa
- United Kingdom
- USA



Compressors

- Wide range of liquid ring compressors for many applications: flare-gas, Chlorine and Vinyl Chlorine Monomer (VCM) recovery, etc.
- Handling of highly toxic, explosive and corrosive gases
- Single and two stage models available
- Capacity: 100 to 3,740 m³/h (60 to 2,200 SCFM)
- Compression: to 15 bar abs. (200 PSIG)



Gardner Denver Nash has many ISO 9001 certifications.



Gardner Denver Nash has an extensive network of sales offices and representatives all over the world.

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