

CHEMISTRY DIAPHRAGM PUMP

MD 4C NT AND MD 4CRL NT

- Three-stage chemistry-design diaphragm pumps are an excellent solution for continuous, oil-free pumping of corrosive gases and vapors and meet many difficult requirements. The three-stage construction provides the advantageous combination of high pumping speed and very low ultimate vacuum. All major parts of the MD 4C NT in contact with pumped media are made of chemically resistant fluoroplastics. Well-proven PTFE sandwich diaphragms provide increased reliability and extended operating life. The MD 4C NT with gas ballast valve is optimally prepared for pumping condensable vapors also of high boiling solvents due to its very good ultimate vacuum (even with gas ballast). The new NT-series features further improved performance data, easy service and superior vapor tolerance.
- For applications requiring an especially high leak tightness of the pump we recommend the MD 4CRL NT. The wetted parts of the pump are made of fluoroplastics and a special, highly corrosion resistant stainless steel. Every single pump is tested for an integral leakage rate of 0.001 mbar l/s.

MD 4C NT
3.4 m³/h
1.5 mbar



MD 4CRL NT
3.4 m³/h
1.5 mbar

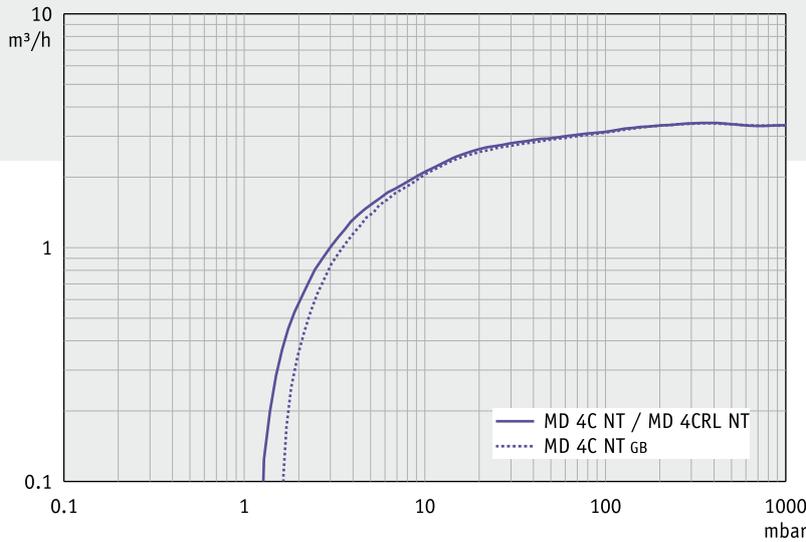


PERFORMANCE FEATURES

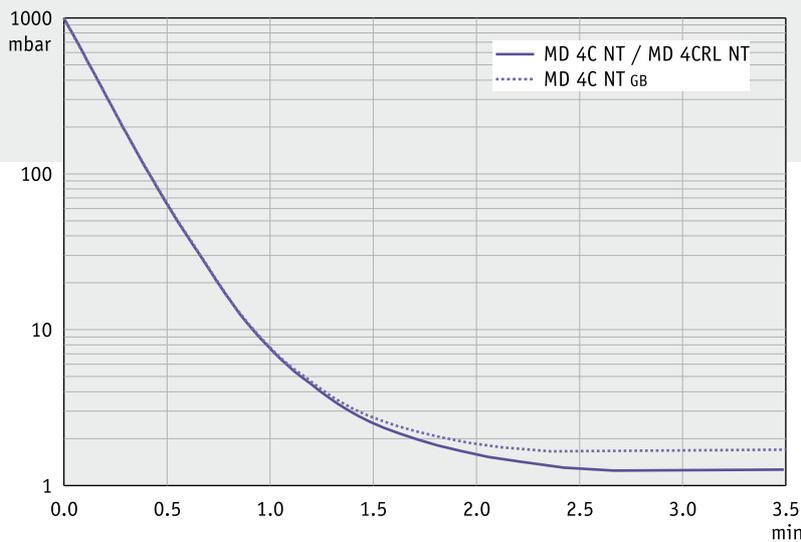
- outstanding chemical resistance and superior vapor tolerance
- exceptionally high performance even at low vacuum
- excellent ultimate vacuum even with gas ballast
- whisper quiet and very low vibration
- long diaphragm life, maintenance-free drive system

APPLICATIONS

Three-stage chemistry-design diaphragm pumps are an excellent choice for applications with corrosive gases and vapors with high vacuum requirements. Typical applications are rotary evaporators, drying ovens and many other laboratory applications. The MD 4C NT has an outstanding performance for pumping large amounts of vapor out of drying ovens and gel dryers. This powerful pump is at the heart of a complete family of well-proven and reliable vacuum systems and pumping units for larger lab applications.



Pumping speed graph at 50 Hz with/without gas ballast



Pump down graph at 50 Hz with/without gas ballast (10 l volume)

Pumping speeds and pump down times are only for information. Ultimate vacuum specification: See "Technical Data"

TECHNICAL DATA	MD 4C NT	MD 4CRL NT
Number of heads / stages	4 / 3	4 / 3
Max. pumping speed at 50/60 Hz m ³ /h	3.4/3.8	3.4/3.8
Ultimate vacuum (abs.) mbar	1.5	1.5
Ultim. vac. (abs.) with gas ballast mbar	3	-
Integral leakage rate mbar l/s	typ. 0.02	0.001
Max. back pressure (EX) (abs.) bar	1.1	1.1
Inlet connection (IN)	Hose nozzle DN 10 mm	Small flange KF DN 16
Outlet connection (EX)	Hose nozzle DN 10 mm	Small flange KF DN 16
Rated motor power kW	0.25	0.25
Degree of protection	IP 40	IP 40
Dimensions (L x W x H) mm	325 x 243 x 198	325 x 243 x 198
Weight kg	14.3	19.8

ORDERING INFORMATION	MD 4C NT
230 V ~ 50-60 Hz	CEE 736400
230 V ~ 50-60 Hz	CH 736401
230 V ~ 50-60 Hz	UK 736402
100-115 V ~ 50-60 Hz	
120 V ~ 60 Hz	US 736403
With NRTL certification for Canada and the USA	

ORDERING INFORMATION	MD 4CRL NT
100-115 V ~ 50-60 Hz / 120 V ~ 60 Hz	
230 V ~ 50-60 Hz	
IEC plug EN 60320	736445*
With NRTL certification for Canada and the USA	

*Please order power cable separately ▶ pg. 167

ACCESSORIES MD 4C NT
Rubber vacuum tubing DN 10 mm (686002)

ACCESSORIES MD 4CRL NT
PTFE tubing KF DN 16 (1000 mm: 686031)
Stainless steel tubing KF DN 16 (1000 mm: 673336)

ITEMS SUPPLIED
Pump completely mounted, ready for use, with manual