

# Chemistry vacuum system

## MD 4C NT +AK SYNCHRO+EK

[Link to the website](#)

### Product description

This chemistry vacuum system provides the simultaneous operation of two processes with only one pump. Typical applications are rotary evaporators, vacuum concentrators and vacuum drying ovens. Each vacuum connection is provided with a manual valve to regulate the effective flow at each port. The MD 4C NT pump offers more than sufficient pumping speed also for the parallel operation of two challenging applications. The separator at the inlet (AK), made of glass with a protective coating, retains particles and liquid droplets. The waste vapor condenser at the outlet (EK) is highly efficient and compact. The condenser enables near-100-percent solvent recovery, efficient recycling and active protection of the environment.

### Performance features

- outstanding chemical resistance and superior vapor tolerance
- exceptionally high performance even at low vacuum
- excellent ultimate vacuum even with gas ballast
- simultaneous operation of two independent vacuum applications, with reliable check valves to prevent interference between systems
- excellent environmental friendliness due to efficient solvent recovery

## Ordering data

Product name	Nominal mains voltage   mains frequency	Plug type	Articleno.
MD 4C NT +AK SYNCHRO+EK	230 V   50-60 Hz	CEE	20736800
MD 4C NT +AK SYNCHRO+EK	230 V   50-60 Hz	CH, CN	20736801
MD 4C NT +AK SYNCHRO+EK	230 V   50-60 Hz	UK, IN	20736802
MD 4C NT +AK SYNCHRO+EK	100-115 V   50-60 Hz 120 V   60 Hz	US	20736803

## Items supplied

Pumping unit completely mounted, ready for use, with manual.

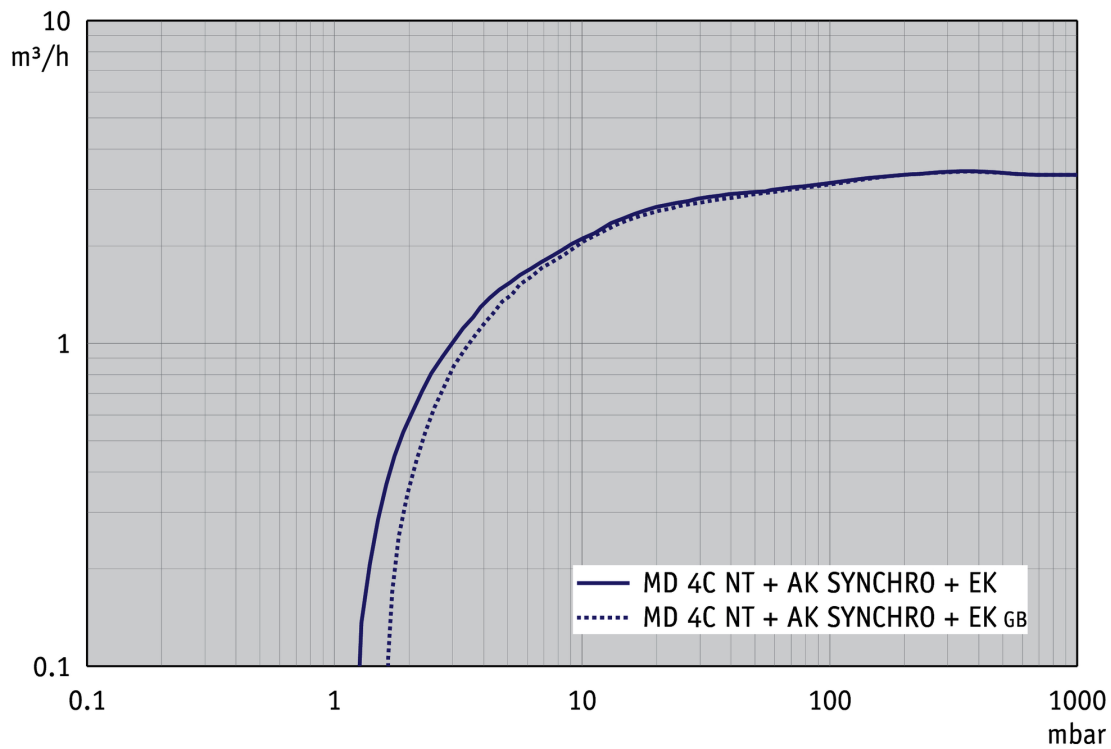
## Accessories

- Silencer with hose 5cm DN 8-10mm (20636588)
- Vacuum tubing transparent DN 8 mm (20686061)
- Upgrade kit manometer for vacuum systems NT SYNCHRO NT SYNCHRO Vakuumsysteme (20699907)
- Set of diaphragms and valves MD 4C NT/VARIO / PC 3003 / PC 3004 (20696870)
- Silencer with hose 5cm DN 8-10mm (20636588)
- Vacuum tubing transparent DN 8 mm (20686061)
- Set of diaphragms and valves MD 4C NT/VARIO / PC 3003 / PC 3004 (20696870)

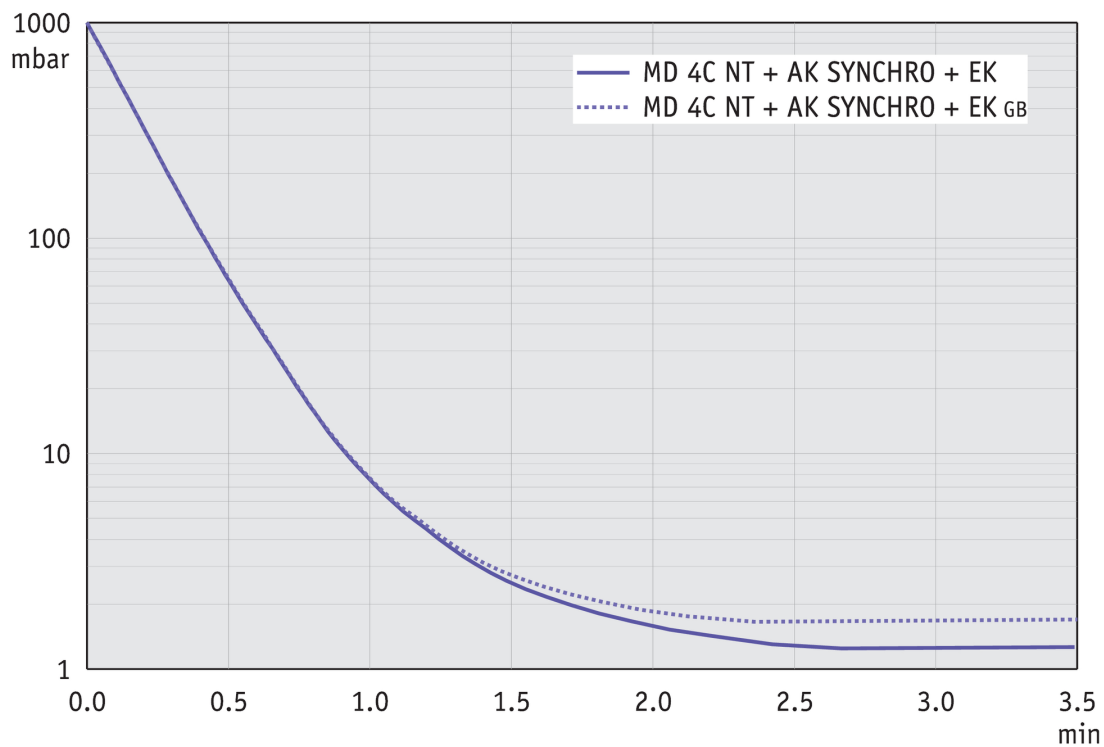
## Technical data

Max. pumping speed 50 Hz (mbar)	3.4 m <sup>3</sup> /h
Max. pumping speed 60 Hz (cfm)	2.2 cfm
Ultimate vacuum	1.5 mbar / 1.1 torr
Ultimate vacuum with gas ballast	3 mbar / 2.2 torr
Number of heads	4
Number of stages	3
Permissible ambient temperature range (operation)	10 - 40 °C
Permissible ambient temperature range (storage)	-10 - 60 °C
Max. outlet pressure (abs.)	1.1 bar
Inlet connection	2 x hose nozzle DN 8-10 mm
Outlet connection	Hose nozzle DN 8-10 mm
Coolant connection	2 x hose nozzle DN 6-8 mm
Rated motor power	0.25 kW
Rated speed 50/60 Hz	1500/1800 min <sup>-1</sup>
Protection class IEC 60529	IP 40
Dimensions (L x W x H)	326 mm x 248 mm x 402 mm
Weight	17.6 kg
Noise (sound pressure level) in dBA at 50 Hz or 1500 rpm/62% (VARIO)/1500 rpm (VARIO-SP)/12500 Upm (VACUU·PURE®)	45 dBA
NRTL certification	Yes

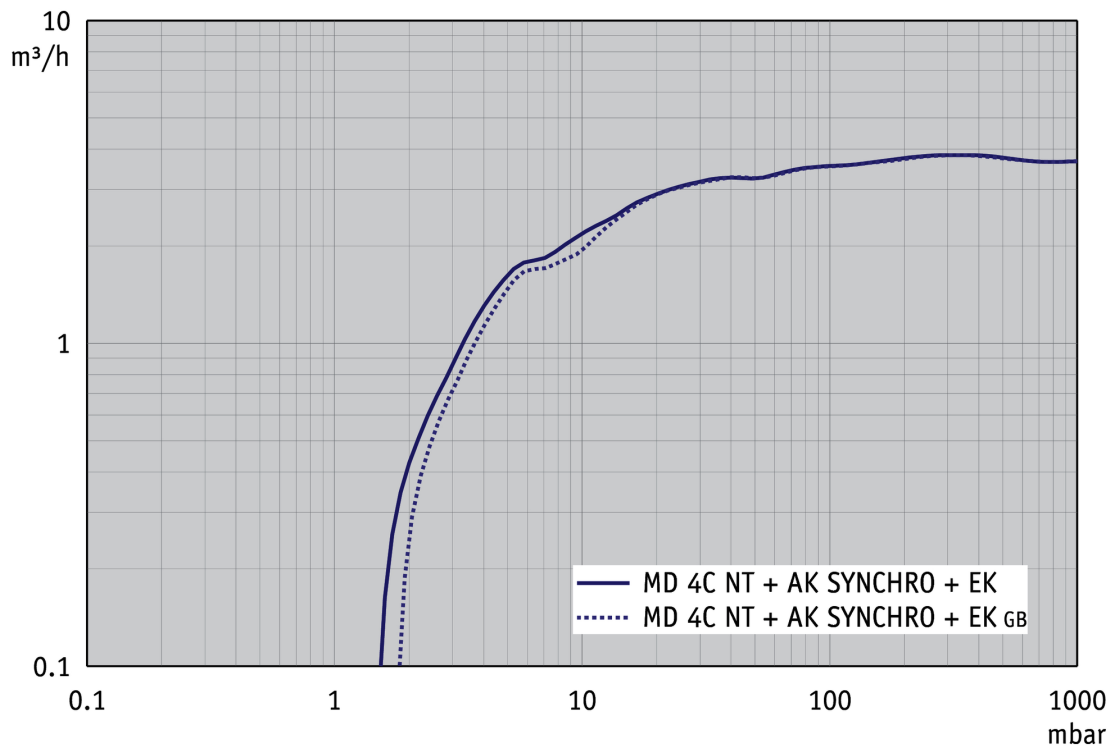
## Pumping speed graph at 50 Hz



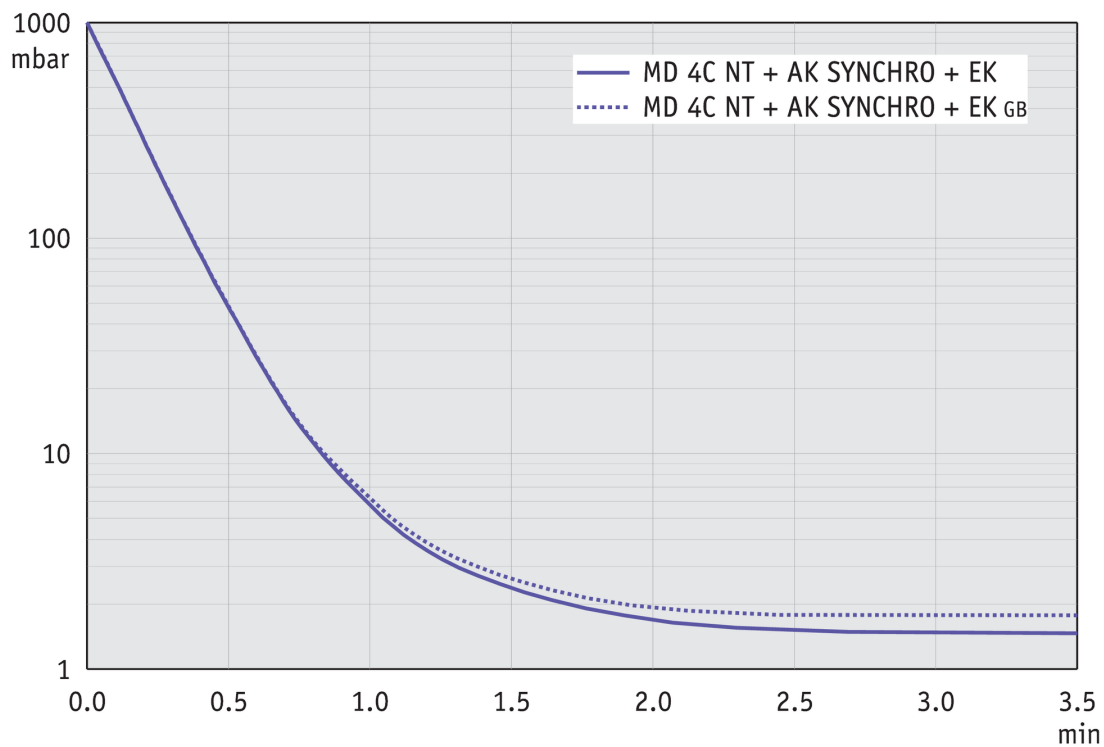
## Pump down graph at 50 Hz (10 l volume)



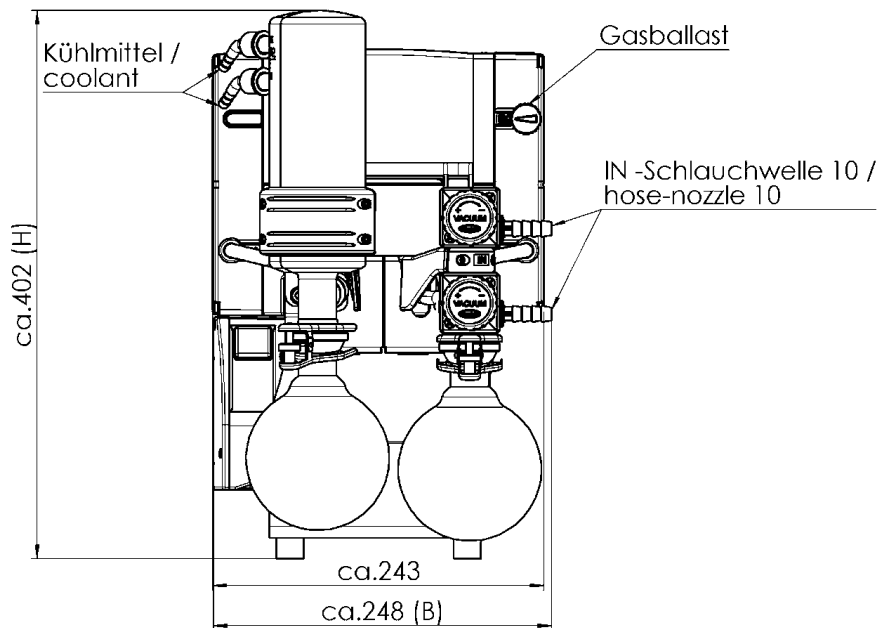
### Pumping speed graph at 60 Hz



### Pump down graph at 60 Hz (10 l volume)

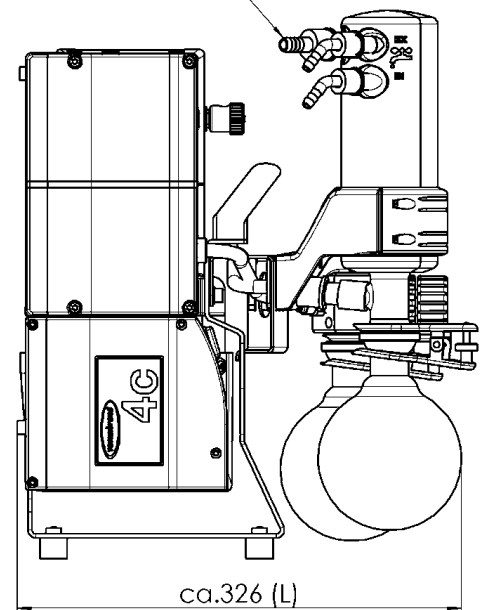


## Dimension sheet



Alle Maße / all dimensions (mm)  
Gewicht / weight: 17,6 kg

EX - Schlauchwelle 10 /  
hose-nozzle 10



VACUUBRAND MD 4C AK-Sy+EK  
Version 2016/05/11

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