

OIL-FREE VACUUM FOR CORROSIVE GASES AND VAPORS



CHEMISTRY DIAPHRAGM PUMPS

Typical applications for chemistry diaphragm pumps include evacuating chemically aggressive gases and vapors from such equipment as rotary evaporators, vacuum drying cabinets and centrifugal concentrators. Chemistry diaphragm pumps from VACUUBRAND feature uncompromising chemistry designs. Their construction with fluoropolymers makes them very resistant to chemical vapors from inlet to exhaust and very tolerant to condensates. Our two-, three- and four-stage pumps also have a gas ballast valve that provides continuous purge with minimal impact on ultimate vacuum when working with condensable vapors. Pumping chambers are hermetically separated from the drive system ensuring long lifetimes of mechanical parts. Most importantly, diaphragm pumps are oil-free, for vastly reduced service demands compared with oil-sealed pumps. They eliminate the cost of water and its contamination well-known from water-jet aspirators, and the waste-oil disposal of rotary vane pumps.

CHEMICALLY RESISTANT

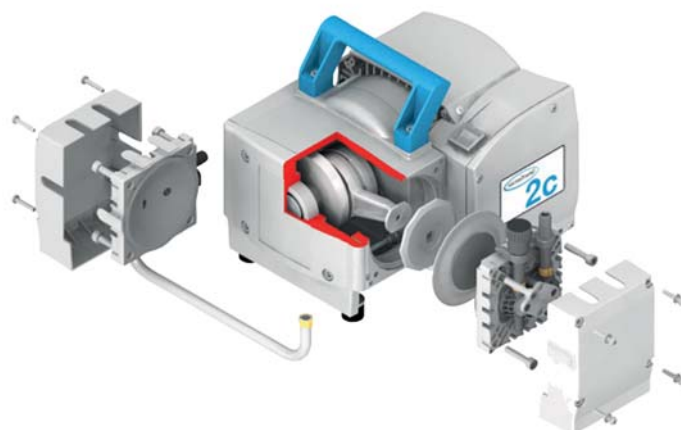
- ◆ PTFE sandwich diaphragms and valves made of per-fluoro elastomer (FFKM) or PTFE
- ◆ internal tubing and fittings made of PTFE/ETFE/ECTFE compounds
- ◆ exceptional diaphragm lifetimes with ultra-durable PTFE sandwich design

DURABLE

- ◆ head cover and clamping disc made of fluoro compounds with stability core for unsurpassed long-term performance
- ◆ very long service intervals for low lifetime cost-of-ownership
- ◆ patented drive system for extra quiet, ultra-low-vibration operation

PRACTICAL

- ◆ patented valve mounting system to simplify service access (NT)
- ◆ smooth surfaces for easy cleaning (NT)
- ◆ sealing system provides reduced leakage rates for improved ultimate vacuum (NT)



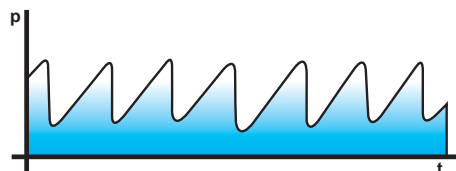
OPTIMIZED LABORATORY PROCESSES - VACUUM CONTROL

Vacuum applications in the laboratory and in industrial operations require versatile vacuum control to:

- ◆ prevent sample loss by foaming or boiling over
- ◆ reduce process times for distillation and evaporation processes
- ◆ reproducible results for drying and evaporation processes
- ◆ reduce time committed to process oversight through automation
- ◆ protect the environment by recovering waste solvent vapors

Two-point regulation by ON/OFF vacuum pump switching

- ◆ A two point-vacuum controller switches a pump on and off as required. The actual vacuum level inevitably fluctuates around the target pressure. This system is well suitable for vacuum networks.



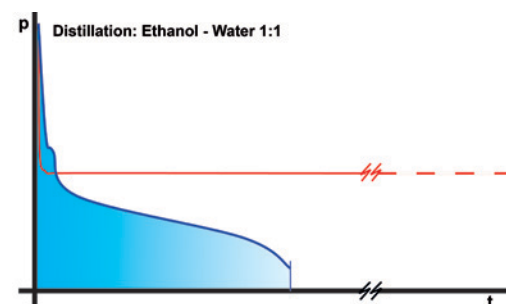
Two-point vacuum control via in-line solenoid valve

- ◆ For pumps without a variable speed motor, the CVC 3000 controller manages the vacuum with an in-line solenoid valve. The actual vacuum level fluctuates around the target pressure, too, but much less than with pump on/off-switching. This makes the system better suitable for process control.

VARIO® controller for fully automatic concentration without need for parameter input

VARIO®-diaphragm pumps and chemistry pumping units control the vacuum automatically and accurately by adjusting the speed of the diaphragm pump. The vacuum controller CVC 3000 in the VARIO®-pumping units detects the boiling pressure automatically and adjusts the vacuum continuously and optimally to the vapor pressure by an adaptive control algorithm.

- ◆ eliminates manual re-adjustment, which saves oversight time
- ◆ optimized pressures reduce foaming, avoiding sample loss
- ◆ waste vapor recovery rates near 100 % keep the lab air clean and protect the environment
- ◆ continuous optimization of boiling pressures results in shortest process times, even with complex solvent mixtures
- ◆ pump runs only as fast as needed - minimizing energy consumption, extending service intervals and reducing noise



- Competitive product in the automatic mode - First boiling pressure is determined, and then maintained. Evaporation stops because the vacuum is not continuously adapted to changing boiling pressures in mixtures
- VACUUBRAND VARIO® controlled vacuum adapts automatically to all boiling points in the mixture, continuously optimizing the process for fast run times without bumping.

TECHNICAL HIGHLIGHTS

Nearly all VACUUBRAND diaphragm pumps and measuring instruments have been approved for ATEX equipment category 3 in the vapor path

Following a very intensive and comprehensive testing process – according to ATEX Directive 2014/34/EC – VACUUBRAND has now verified that most of its diaphragm pumps and pumping units do not have ignition sources in the internal, wetted parts area, and so meet the requirements of ATEX equipment category 3. This includes capacitive vacuum sensors, measuring devices and solenoid operated valves.

- ◆ applicable for pumping of Ex-mixtures “infrequently” or “for a short period”
- ◆ during normal operation there is no ignition source in the internal, wetted parts area
- ◆ at gas temperatures up to 40°C the maximum surface and gas temperatures in the internal, wetted parts area remain below the limits specified in ATEX temperature class T3
- ◆ for areas with hazardous atmosphere around the pump and for “occasional” pumping of Ex-mixtures the special ATEX pumps for category 2 (inside and around the pump, for example, for Zone 1) continue to be recommended

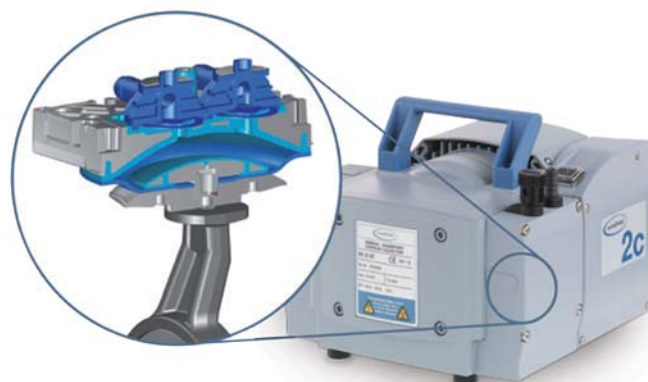


■ Environment, no Ex-zone
■ Wetted parts Zone 2

The VACUUBRAND stability core principle: for unprecedented long-term performance

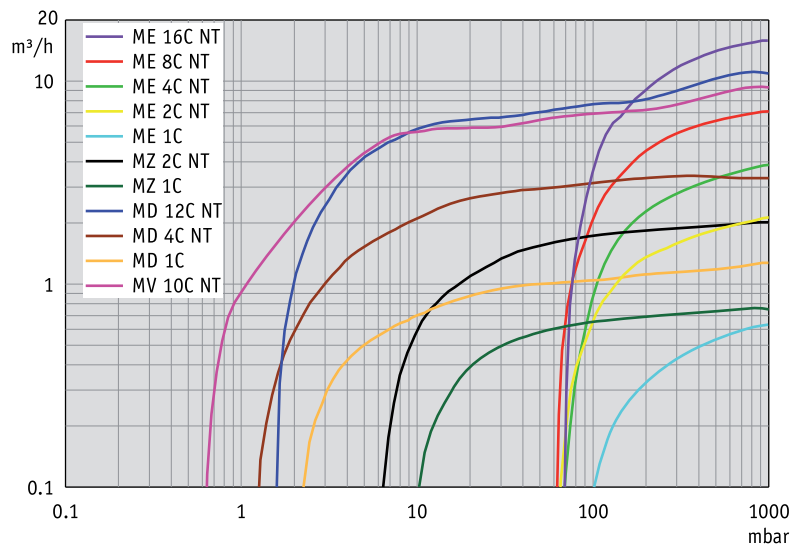
VACUUBRAND chemistry diaphragm pumps provide optimum performance and unsurpassed service intervals even in harsh chemical applications. We achieve this unmatched reliability by manufacturing the most highly stressed components – the head cover and clamping disk – in a sophisticated multi-step process.

- ◆ high quality carbon-fiber-reinforced fluoroplastics provide long term chemical resistance
- ◆ this thick-walled, diffusion resistant, molded fluoroplastic is supported by a stable metallic core for durability
- ◆ mechanical precision finishing ensures reproducible VACUUBRAND quality
- ◆ 100 % quality control testing after “run-in” at destination-market electrical voltage



CHEMISTRY DIAPHRAGM PUMPS, CHEMISTRY VACUUM SYSTEMS AND CHEMISTRY PUMPING UNITS

Our chemistry diaphragm pumps are available in a full range of volume flow rates and ultimate vacuum options. Single-stage models reach as much as 70 mbar (absolute) vacuum. Connecting pump heads in series as two-, three- or four-stage pumps improves an ultimate vacuum to as much as 0.6 mbar. Connecting heads in parallel provides higher flow rates. Our line offers combinations that satisfy virtually any laboratory need.



Nomenclature for VACUUBRAND pumps is built from the following codes designating specific features or components:

M = diaphragm (membrane) pump

E, Z, D, V = number of pump stages

E = single stage, up to 70 mbar

Z = two stages, up to 7 mbar

D = three stages, up to 1.5 mbar

V = four stage, up to 0.6 mbar

C = chemistry design, with fluoropolymer flowpath

NT = labels the series of pumps comprising the New Technology

AK = separator catchpot for inlet or outlet condensates, collects particles and droplets, keeps condensate in vacuum line from flowing into the pump, protecting pump performance and providing additional noise reduction on the pressure side

EK = exhaust vapor (emission) condenser for nearly 100 % solvent recovery in compact design, protect-

ing environment and lab air

TE = dry ice or water ice cooled emission condenser for solvent recovery

PC = "Pumping Unit, Chemistry" - a chemistry pump with vacuum control and solvent recovery

Chemistry vacuum system = a chemistry pump with accessories like inlet catchpot and/or solvent recovery

Chemistry pumping unit = a chemistry vacuum system with vacuum control and solvent recovery

SYNCHRO = pumping unit for simultaneous operation of two independent vacuum applications by a single pump

				
Ultimate vacuum (abs.)	Chemistry diaphragm pumps Basic pump	Chemistry vacuum systems with solvent recovery	Chemistry pumping units vacuum control and solvent recovery	Chemistry pumping units with two vacuum ports to operate two applications simultaneously
down to 70 mbar	ME 1C pg. 36 0.7 m ³ /h ME 2C NT pg. 38 2.1 m ³ /h ME 4C NT pg. 38 3.9 m ³ /h ME 8C NT pg. 40 7.1 m ³ /h ME 16C NT pg. 42 16.3 m ³ /h ME 16C NT VARIO pg. 42 19.3 m ³ /h	ME 4C NT +2AK pg. 38 3.9 m ³ /h ME 8C NT +2AK pg. 40 7.1 m ³ /h ME 16C NT +EK pg. 42 16.3 m ³ /h	PC 3016 NT VARIO pg. 44 19.3 m ³ /h	
down to 7 mbar	MZ 1C pg. 46 0.75 m ³ /h MZ 2C NT pg. 48 2.0 m ³ /h MZ 2C NT VARIO pg. 58 2.8 m ³ /h	MZ 2C NT +2AK pg. 50 2.0 m ³ /h MZ 2C NT +AK+EK pg. 51 2.0 m ³ /h MZ 2C NT +AK+M+D pg. 53 2.0 m ³ /h	PC 101 NT pg. 54 2.0 m ³ /h PC 510 NT pg. 55 2.0 m ³ /h PC 3002 VARIO pg. 58 2.8 m ³ /h	MZ 2C NT +AK SYNCHRO+EK pg. 52 2.0 m ³ /h PC 511 NT pg. 56 2.0 m ³ /h PC 520 NT pg. 57 2.0 m ³ /h
down to 1.5 mbar	MD 1C pg. 60 1.3 m ³ /h MD 4C NT pg. 66 3.4 m ³ /h MD 4CRL NT pg. 68 3.4 m ³ /h MD 4C NT VARIO pg. 76 4.6 m ³ /h MD 12C NT pg. 78 11.1 m ³ /h MD 12C NT VARIO pg. 82 12.9 m ³ /h	MD 1C +AK+EK pg. 62 1.3 m ³ /h PC 3001 basic pg. 63 2.0 m ³ /h MD 4C NT +2AK pg. 69 3.4 m ³ /h MD 4C NT +AK+EK pg. 70 3.4 m ³ /h MD 12C NT +EK pg. 80 11.1 m ³ /h MD 12C NT +AK+EK pg. 80 11.1 m ³ /h	PC 3001 VARIO^{pro} pg. 64 2.0 m ³ /h PC 201 NT pg. 72 3.4 m ³ /h PC 610 NT pg. 73 3.4 m ³ /h PC 3004 VARIO pg. 76 4.6 m ³ /h PC 3012 NT VARIO pg. 82 12.9 m ³ /h PC 3012 NT VARIO DUO pg. 84 25 m ³ /h	MD 4C NT +AK SYNCHRO+EK pg. 71 3.4 m ³ /h PC 611 NT pg. 74 3.4 m ³ /h PC 620 NT pg. 75 3.4 m ³ /h
down to 0.6 mbar	MV 10C NT pg. 88 9.5 m ³ /h MV 10C NT VARIO pg. 90 11.6 m ³ /h	MV 10C NT +EK pg. 88 9.5 m ³ /h	PC 3003 VARIO pg. 86 2.8 m ³ /h PC 3010 NT VARIO pg. 90 11.6 m ³ /h	

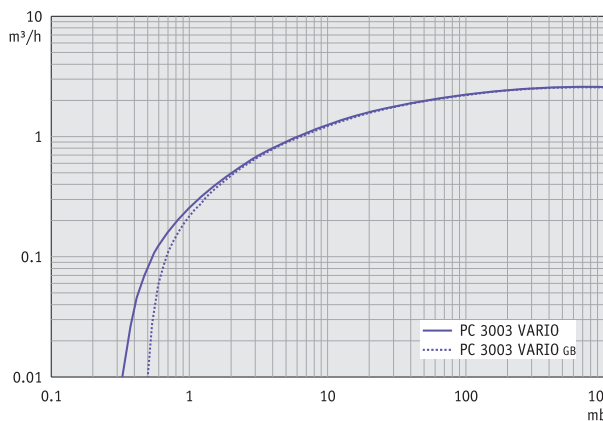
- VARIO®: automatic optimization of vacuum levels throughout the process for high process reliability and unattended operation
- VARIO®: short process times due to powerful pump and zero-fluctuation (hysteresis-free) vacuum control
- VARIO®: easily operated CVC 3000 vacuum controller with clear text menus and integrated venting valve
- ideal for high-boiling solvents and evaporation at low temperatures
- excellent environmental friendliness due to efficient solvent recovery



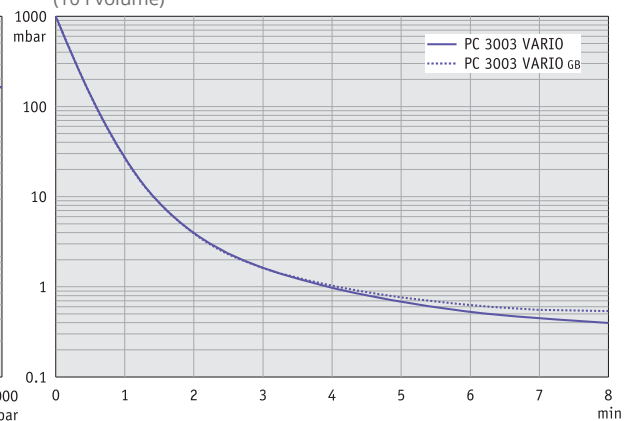
PC 3003 VARIO

This VARIO® pumping unit provides precise vacuum control by adjusting the diaphragm pump's motor speed. It features fully automatic evaporation control at the push of a button. The PC 3003 VARIO provides an excellent ultimate vacuum and is therefore the best solution for evaporations of high boiling solvents even at low temperatures. It combines extraordinary performance with a compact design and very low noise. The separator at the inlet, made of glass with protective coating, retains particles and liquid droplets to protect pump performance. The exhaust vapor condenser at the outlet enables near-100-percent solvent recovery. The on-demand motor speed control results in unsurpassed lifetimes for service parts, such as diaphragms.

Pumping speed graph
with/without gas ballast



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



Further information at www.vacuubrand.com

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

CHEMISTRY DIAPHRAGM PUMPS

TECHNICAL DATA**PC 3003 VARIO**

Vacuum controller	CVC 3000
Number of heads / stages	4 / 4
Max. pumping speed	2.8 m ³ /h
Ultimate vacuum (abs.)	0.6 mbar
Ultim. vac. (abs.) with gas ballast	1.5 mbar
Max. back pressure (abs.)	1.1 bar
Inlet connection	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	0.53 kW
Degree of protection	IP 40
Dimensions (L x W x H), approx.	419 x 243 x 444 mm
Weight, approx.	20.6 kg

ACCESSORIES

Coolant valve VKW-B (674220)
 Vent valve VBM-B (674217)
 Liquid level sensor (699908)
 Rubber vacuum tubing DN 8 mm (686001)

ITEMS SUPPLIED

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

ORDERING INFORMATION**PC 3003 VARIO**

200-230 V ~ 50-60 Hz	CEE	Ex*	738400
200-230 V ~ 50-60 Hz	CH, CN	Ex*	738401
200-230 V ~ 50-60 Hz	UK, IN	Ex*	738402
100-120 V ~ 50-60 Hz	US		738403

****PC 3003 VARIO EK PELTRONIC**

on request

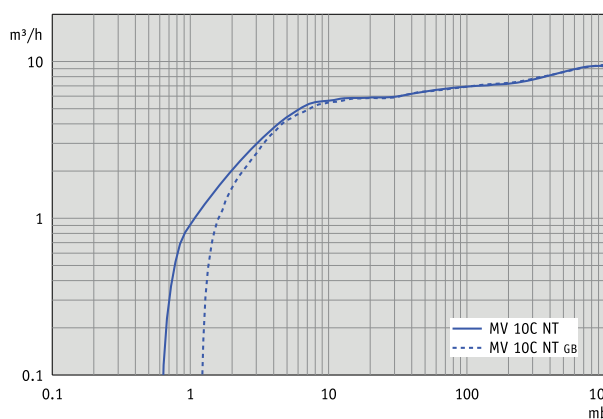
- ✦ outstanding chemical resistance and superior vapor tolerance
- ✦ reduced process time due to very high flow rates even close to ultimate vacuum
- ✦ very low vibration and quiet
- ✦ excellent ultimate vacuum even with gas ballast
- ✦ on models with EK: excellent environmental friendliness due to efficient solvent recovery



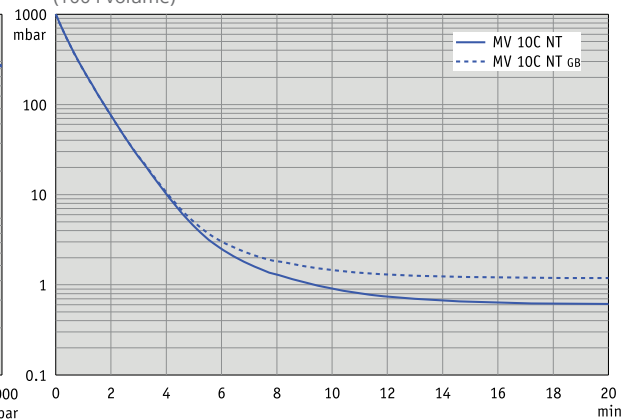
MV 10C NT - MV 10C NT +EK

Four-stage chemistry-design diaphragm pumps are an excellent solution for continuous, oil-free pumping of corrosive gases and vapors and meet highest requirements. The four-stage design of the eight-cylinder pump MV 10C NT provides the advantageous combination of high pumping speed and very low ultimate vacuum of 0.9 mbar in a very compact design. All internal parts in contact with pumped media are made of chemically resistant fluoroplastics. Well-proven PTFE sandwich diaphragms increase reliability and extend operating life. Upgraded with an exhaust waste vapor condenser (EK) the MV 10C NT +EK provides an excellent, environmentally friendly system with efficient solvent recovery. A separator for the inlet (AK) made of glass (with protective coating) against particles and liquid droplets is available as an optional accessory.

Pumping speed graph at 50 Hz
with/without gas ballast



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



CHEMISTRY DIAPHRAGM PUMPS

TECHNICAL DATA**MV 10C NT**

Number of heads / stages	8 / 4
Max. pumping speed 50/60 Hz	9.5 / 10.7 m ³ /h
Ultimate vacuum (abs.)	0.9 mbar
Ultim. vac. (abs.) with gas ballast	1.5 mbar
Max. back pressure (abs.)	1.1 bar
Inlet connection	Small flange KF DN 25
Outlet connection	Hose nozzle DN 15 mm
Rated motor power	0.44 kW
Degree of protection	IP 40
Dimensions (L x W x H), approx.	533 x 260 x 359 mm
Weight, approx.	28.1 kg

TECHNICAL DATA**MV 10C NT +EK**

Number of heads / stages	8 / 4
Max. pumping speed 50/60 Hz	9.5 / 10.7 m ³ /h
Ultimate vacuum (abs.)	0.9 mbar
Ultim. vac. (abs.) with gas ballast	1.5 mbar
Max. back pressure (abs.)	1.1 bar
Inlet connection	Small flange KF DN 25
Outlet connection	Hose nozzle DN 8-10 mm
Coolant connection	2 x hose nozzle DN 6-8 mm
Rated motor power	0.44 kW
Degree of protection	IP 40
Dimensions (L x W x H), approx.	528 x 387 x 395 mm
Weight, approx.	29.1 kg

ACCESSORIES MV 10C NT

PTFE tubing KF DN 25 (1000 mm: 686033)
 Inlet separator KF DN 25 (699979)
 Centering and sealing ring KF DN 25 C Al/FEP (635722)
 Emission condenser kit for eight cyl. NT pump models
 (699948)

ACCESSORIES MV 10C NT +EK

PTFE tubing KF DN 25 (1000 mm: 686033)
 Inlet separator KF DN 25 (699979)
 Centering and sealing ring KF DN 25 C Al/FEP (635722)

ITEMS SUPPLIED

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

ORDERING INFORMATION**MV 10C NT**

230 V ~ 50-60 Hz	CEE	Ex*	744300
230 V ~ 50-60 Hz	UK, IN	Ex*	744302
100-115 V ~ 50-60 Hz /			
120 V ~ 50-60 Hz	US		744303

ORDERING INFORMATION**MV 10C NT +EK**

230 V ~ 50-60 Hz	CEE	Ex*	744500
100-115 V ~ 50-60 Hz /			
120 V ~ 50-60 Hz	US		744503

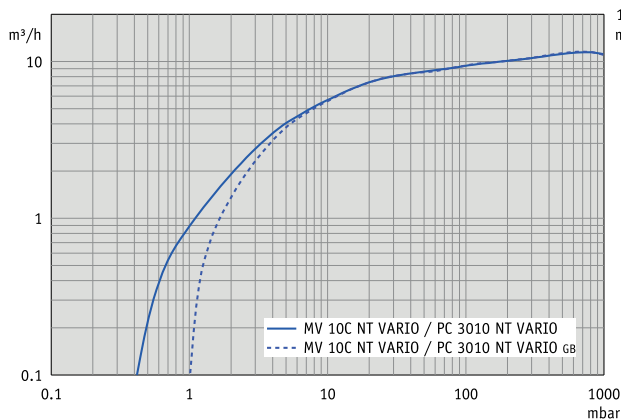
- VARIO®: automatic optimization of the vacuum level throughout the process for high process reproducibility and unattended operation
- VARIO®: short process times due to zero-fluctuation (hysteresis-free) vacuum control, even for large amounts of vapor
- VARIO®: removable CVC 3000 vacuum controller, can be arranged flexibly, easily operated with clear text menus
- extraordinary diaphragm life for minimum operational and servicing costs
- PC 3010 NT VARIO: excellent environmental friendliness due to efficient solvent recovery



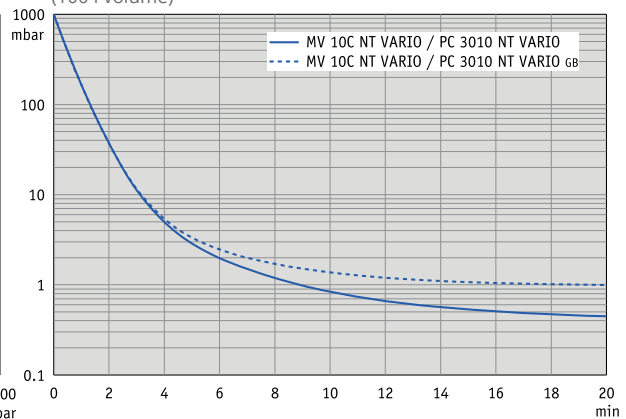
MV 10C NT VARIO - PC 3010 NT VARIO

These VARIO® pumps and pumping units feature a very high pumping speed and attain an outstanding ultimate vacuum. They are ideal for high vacuum requirements, e.g., for evaporation of most high boiling solvents even at low temperatures. They provide precise vacuum control by adjusting the diaphragm pump's motor speed. The controller provides fully automatic evaporations without any need of parameter input. The pump design offers exceptionally high chemical resistance supporting almost universal usage in chemistry and pharmaceuticals. The PC 3010 NT VARIO pumping unit relies on a well-proven operating concept for example for evaporation of large amounts of solvents. The inlet separator (AK) 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. For the MV 10C NT VARIO these accessories are optionally available and can be mounted later.

Pumping speed graph
with/without gas ballast



Pump down graph
with/without gas ballast
(100 l volume)



Further information at www.vacuubrand.com

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

CHEMISTRY DIAPHRAGM PUMPS

TECHNICAL DATA**MV 10C NT VARIO**

Vacuum controller	CVC 3000
Number of heads / stages	8 / 4
Max. pumping speed	11.6 m ³ /h
Ultimate vacuum (abs.)	0.6 mbar
Ultim. vac. (abs.) with gas ballast	1.2 mbar
Max. back pressure (abs.)	1.1 bar
Inlet connection	Small flange KF DN 25
Outlet connection	Hose nozzle DN 15 mm
Vacuum sensor connection	PTFE tubing connection 10/8 mm, hose nozzle DN 6/10 mm
Rated motor power	0.53 kW
Degree of protection	IP 40
Dimensions (L x W x H), approx.	533 x 260 x 420 mm
Weight, approx.	28.1 kg

TECHNICAL DATA**PC 3010 NT VARIO**

Vacuum controller	CVC 3000
Number of heads / stages	8 / 4
Max. pumping speed	11.6 m ³ /h
Ultimate vacuum (abs.)	0.6 mbar
Ultim. vac. (abs.) with gas ballast	1.2 mbar
Max. back pressure (abs.)	1.1 bar
Inlet connection	Small flange KF DN 25 / hose nozzle DN 15 mm
Outlet connection	Hose nozzle DN 8-10 mm
Coolant connection	2 x hose nozzle DN 6-8 mm
Vacuum sensor connection	PTFE tubing connection 10/8 mm, hose nozzle DN 6/10 mm
Rated motor power	0.53 kW
Degree of protection	IP 40
Dimensions (L x W x H), approx.	616 x 387 x 420 mm
Weight, approx.	29.7 kg

ACCESSORIES MV 10C NT VARIO

PTFE tubing KF DN 25 (1000 mm: 686033)
 Inlet separator KF DN 25 (699979)
 Centering and sealing ring KF DN 25 C Al/FEP (635722)
 Emission condenser kit for eight cyl. NT pump models (699948)

ORDERING INFORMATION**MV 10C NT VARIO**

200-230 V ~ 50-60 Hz	CEE	Ex*	744700
200-230 V ~ 50-60 Hz	UK, IN	Ex*	744702
100-120 V ~ 50-60 Hz	US		744703

ACCESSORIES PC 3010 NT VARIO

PTFE tubing KF DN 25 (1000 mm: 686033)
 Centering and sealing ring KF DN 25 C Al/FEP (635722)

ORDERING INFORMATION**PC 3010 NT VARIO**

200-230 V ~ 50-60 Hz	CEE	Ex*	744800
200-230 V ~ 50-60 Hz	CH, CN	Ex*	744801
200-230 V ~ 50-60 Hz	UK, IN	Ex*	744802
100-120 V ~ 50-60 Hz	US		744803

ITEMS SUPPLIED

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

ACCESSORIES FOR CHEMISTRY DIAPHRAGM PUMPS

PELTRONIC® EMISSION CONDENSER (EK)

The Peltronic® emission condenser performs condensation of solvent vapors without external coolant such as water or dry ice. It works electronically and uses Peltier elements as cooling system. All wetted parts are highly chemically resistant. The condenser is especially designed to be added to existing pumping units and allows the replacement of common condensers working with external coolant. The condenser is ideally suited for applications where cooling water is not available or desired, or in case of cost and productivity concerns associated with dry ice condensers. It is often used to reduce cooling water usage for environmental reasons or to prevent the risk of flooding from cooling water plumbing leakage. This frequently is requested for vacuum networks built into lab furniture. If the Peltronic® is connected to a CVC 3000 vacuum controller it is switched on/off automatically on demand.

Peltronic® emission condenser



TECHNICAL DATA

PELTRONIC

Rated mains voltage / mains frequency	100-120 V / 200-230 V ~ 50-60 Hz
Cooling capacity at 21°C ambient temp.	50 W
Ambient temperature range	10 - 40 °C
Condensation set-point temperature	10 °C
Inlet connection	PTFE tubing connection 10/8 mm
Outlet connection	PTFE tubing connection 10/8 mm, hose nozzle DN 10 mm
Volume of condensate catchpot	500 ml
Power draw	7 - 160 W (controlled)
Heat dissipation	7 - 200 W
Dimensions (L x W x H), approx.	175 x 179 x 392 mm
Weight, approx.	4.3 kg

ITEMS SUPPLIED

Condenser ready for use with electronic control, status indicator, temperature control, switch, PTFE tubing ready to connect to many VACUUBRAND pumping units, catchpot 500ml, catchpot clamp. Universal power supply; please order power cable separately.

SUPPLEMENTARY MODULES FOR CHEMISTRY PUMPING UNITS

The upgrade kit SYNCHRO for a second vacuum connection can be equipped, depending on the application, with a manual flow control valve (677137) or an in-line solenoid valve (636668) for electronic vacuum control with the CVC 3000 vacuum controller. These functional elements for individual vacuum control are necessary to operate the vacuum ports. Order this essential accessory separately, please.

Upgrade kit for chemistry pumping units for a second inlet port



Upgrade kit I: Inlet separator and CVC 3000 controller for PC 3001 basic

Inlet separator, vacuum controller CVC 3000 and assembling accessory to upgrade the PC 3001 basic to a pumping unit with electronic vacuum control. The separator protects the pump effectively and extends diaphragm lifetime considerably.

Upgrade kits for PC 3001 basic



Upgrade kit II: Complete exhaust vapor condenser assembly for PC 3001 basic

Exhaust waste vapor condenser with catchpot for efficient solvent recovery.

The liquid level sensor is designed to be mounted at the neck of a VACUUBRAND 500 ml catchpot and works with the CVC 3000 controller. It monitors the liquid level in catchpots of emissions condensers and inlet separators. The process is halted and an alarm sounded if the catchpots are close to overflowing. The sensor detects all common solvents without any contact to the solvents.

Liquid level sensor for catchpot 500ml



Suitable for all VACUUBRAND exhaust vapor condensers and catch pots with glass joint connections

Solvent drain for exhaust vapor condenser



ACCESSORIES FOR CHEMISTRY DIAPHRAGM PUMPS

SUPPLEMENTARY MODULES FOR CHEMISTRY PUMPING UNITS

For all NT diaphragm pumps with flange KF DN 25 (all types ME 16(C) NT, MD 12(C) NT, MV 10(C) NT and their pumping units). Inlet with small flange KF DN 25 and hose nozzle DN 15 mm.

Inlet separator AK with round bottom flask 500 ml, with connections KF DN 25 and hose nozzle DN 15 mm



This upgrade kit enables the remote operation of all vacuum pumping units with the CVC 3000. The kit consists of a stand, a 2 m cable, and parts for assembly (including a cover plate for the controller mounting space of PC 3001 VARIO^{pro} and pumping units with plastic housing).

Conversion kit for remote pump control with the CVC 3000



With VACUU·CONTROL[®] the user can control and monitor his application at any time, for example from the office, using a LAN or WLAN - enabled device. So at the same time users can focus on and carry out other work whilst monitoring the process remotely. The vacuum process is automatically documented with the datalogger function and is fully traceable. The remote VACUU·CONTROL[®] can be used as a flexible alternative to building in a CVC 3000 controller into the laboratory furniture. The monitoring of multiple vacuum systems via a central control station is also possible.

Remote Control
VACUU·CONTROL



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The VACUU·LAN[®] Mini-Network is a space saving VACUU·LAN[®] network assembly with three VACUU·LAN[®] valve modules pre-plumbed on a channel that can be attached to a wall or lab frame. The Mini-Network tubing is to be connected to a new VACUUBRAND diaphragm vacuum pump, or an oil-free vacuum pump that you already own, with vacuum tubing, and your one pump now supports three applications. Each VACUU·LAN[®] Mini-Network includes three manual flow control valves for continuously variable pumping speed adjustment. Ball Valve control and electronically controlled ports are optionally available. Each port is check-valve controlled to minimize interference among applications.

Mini-Network VACUU·LAN[®] with 3 vacuum connections (manual valves)



ACCESSORIES FOR CHEMISTRY DIAPHRAGM PUMPS

ORDERING INFORMATION ACCESSORIES FOR CHEMISTRY DIAPHRAGM PUMPS

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Peltronic® emission condenser	699905
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ORDERING INFORMATION PAGE 93

Upgrade kit for chemistry pumping units for a second inlet port	699920
Upgrade kit for chemistry pumping units with plastic housing (PC 510 NT, PC 610 NT) for a second inlet port	699942
Add-on manual flow control valve C2	677137
Add-on in-line solenoid valve C3-B	636668
Vacuum controller CVC 3000	683160
Upgrade kit I: Inlet separator and CVC 3000 controller for PC 3001 basic	699921
Upgrade kit II: Complete exhaust vapor condenser assembly for PC 3001 basic	699922
Solvent drain for exhaust vapor condenser, Adapter from KS 35 to hose nozzle DN 6/10mm	2618398
Liquid level sensor for VACUUBRAND catchpot 500 ml	699908

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Conversion kit for remote pump control with the CVC 3000	699923
Small flange KF DN 16 / G1/2" as outlet for diaphragm pumps ME 16(C) NT, MD 12(C) NT, MV 10(C) NT	672101
VACUU-CONTROL® LAN	683120
VACUU-CONTROL® WLAN	683110
Mini-Network VACUU-LAN® with 3 vacuum connections (manual valves)	2614455
Inlet separator AK with connections KF DN 25 (ME 16C NT, MD 12C NT, MV 10C NT)	699979

ORDERING INFORMATION ACCESSORIES / SPARE PARTS

Upgrade kit exhaust vapor condenser for NT series (ME 16C NT, MD 12C NT, MV 10C NT)	699948
Upgrade kit manometer for vacuum ports at pumping units NT SYNCHRO and PC 511 / 611 NT	699907
Cooling water valve VKW 230 V UK	676012
Cooling water valve VKW 230 V CEE	676014
Round bottom flask 500ml with spherical joint, coated	638497
Catchpot clip stainless steel	
suitable for all VACUUBRAND glass catchpots	637627
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