

**PROCESS EFFICIENCY -  
LOOKING GOOD  
FOR THE FUTURE**



## **Vacuum processes efficiently redesigned – with the New Generation of Chemistry Pumping Units.**

THE NEW COLLECTION OF NT AND VARIO™  
CHEMISTRY PUMPING UNITS



**Technology for Vacuum Systems**

## HIGH EFFICIENCY WITH PARALLEL OPERATION

Have you ever considered the space and money you could save through operating your rotary evaporator or other vacuum processes in parallel whilst still maintaining automated, reproducible vacuum conditions with high process safety?

The new PC 500 NT (7 mbar) and PC 600 NT (1.5 mbar) chemistry pumping unit collection offer precisely this option; allowing a flexible and application based configuration of the vacuum ports for the simultaneous operation of two independent vacuum processes whilst using only a single pump.



PC 520 NT  
with two CVC 3000

vacuum ports  
for parallel operation

- The premium versions **PC 520 NT/PC 620 NT** are designed for automated parallel operation of two independent application processes. They are equipped with two cutting-edge vacuum controllers CVC 3000 and solenoid vacuum valves. In addition to offering accurate and intuitive two-point vacuum control, each controller also has ten fully user definable programs to enable individually formulated processes to be stored and run.
- The standard versions **PC 511 NT/PC 611 NT** are excellent if you need only one electronically controlled vacuum port with CVC 3000 controller for your process automation and would like to use the second port for simple vacuum applications with a manual flow control valve. Upgrading to a second electronically controlled vacuum port (with CVC 3000) is possible at any time.
- The basic versions **PC 510 NT/PC 610 NT** are the best if you only need one vacuum port, but with the option for upgrading later. They have one electronically controlled port with CVC 3000 and can be upgraded at any time with either an additional manually or electronically controlled port.

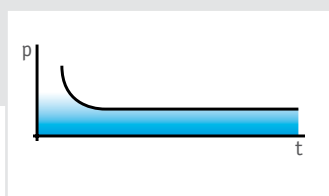
### PERFORMANCE FEATURES

- energy efficient chemistry pumping units with oil free NT diaphragm pumps
- outstanding chemical resistance and vapor tolerance
- excellent ultimate vacuum even with gas ballast
- simultaneous operation of two independent vacuum processes (standard and premium versions) with integrated check valves to prevent cross-contamination
- high performance even during parallel operation
- innovative CVC 3000 vacuum controller for intuitive operation and automated vacuum regulation
- whisper quiet and ultra low vibration
- class leading diaphragm lifetimes and user friendly servicing
- smoothly designed and compact housing made of laboratory suitable plastics
- excellent environmental friendliness due to efficient solvent recovery

## OPTIMAL PERFORMANCE WITH VARIO™ OPERATION

Do you get tired of continuously monitoring your evaporation and other vacuum processes? What if you could avoid that lost time and additionally save energy - Interested? How about fully automated, precise single point vacuum control?

The new series of highly efficient and compact VARIO chemistry pumping units PC 3002 VARIO (7 mbar), PC 3003 VARIO (0.6 mbar) and PC 3004 VARIO (1.5 mbar), offer the latest state-of-the-art vacuum control technology (CVC 3000) combined with whisper quiet variable speed chemistry diaphragm pumps.



PC 3004 VARIO

fully automated,  
precise single point  
vacuum control and regulation

- With just the touch of a button the CVC 3000 vacuum controller detects the boiling point of solvents automatically and precisely and regulates the vacuum continuously without the need for any programming whatsoever. Achieving and maintaining a continuous optimal evaporation rate results in up to 30% faster process cycles without foaming or bumping – even with complex solvent mixtures.
- The variable speed technology of the VARIO-pump not only delivers precise vacuum control; it also offers significant energy efficiency savings, reduced noise pollution and dramatically enhanced diaphragm and valves lifetime, up to many years continuous-running operation.

### PERFORMANCE FEATURES

- energy-efficient chemistry pumping units with oil free, variable speed NT diaphragm pump
- outstanding chemical resistance and vapor tolerance
- excellent ultimate vacuum even with gas ballast
- fully automatic, precise boiling point detection on the touch of a button - even with complex solvent mixtures
- high process safety without foaming or bumping
- up to 30% faster process times
- innovative CVC 3000 vacuum controller with intuitive operation
- whisper quiet and low vibration operation
- significantly increased diaphragm and valves lifetime, up to many years continuous-running operation
- smoothly designed and compact housing made of laboratory suitable plastics
- excellent environmental friendliness due to efficient solvent recovery

## THE PC 500 NT COLLECTION

TECHNICAL DATA		PC 510 NT	PC 511 NT	PC 520 NT
Basic pump		MZ 2C NT	MZ 2C NT	MZ 2C NT
Vacuum controller		CVC 3000	CVC 3000	2 x CVC 3000
Max. pumping speed 50/60 Hz	m <sup>3</sup> /h	2.0 / 2.3	2.0 / 2.3	2.0 / 2.3
Ultimate vacuum (abs.)	mbar	7	7	7
Ultim. vac. (abs.) with gas ballast	mbar	12	12	12
Dimensions (L x W x H)	mm	415 x 243 x 444	435 x 243 x 444	435 x 361 x 444
Weight	kg	16.7	16.9	17.7
ORDERING INFORMATION				
230 V ~ 50-60 Hz	CEE	733100	733200	733300
230 V ~ 50-60 Hz	CH	733101	733201	733301
230 V ~ 50-60 Hz	UK	733102	733202	733302
100-120 V ~ 50-60 Hz	US	733103	733203	733303

## THE PC 600 NT COLLECTION

TECHNICAL DATA		PC 610 NT	PC 611 NT	PC 620 NT
Basic pump		MD 4C NT	MD 4C NT	MD 4C NT
Vacuum controller		CVC 3000	CVC 3000	2 x CVC 3000
Max. pumping speed 50/60 Hz	m <sup>3</sup> /h	3.4 / 3.8	3.4 / 3.8	3.4 / 3.8
Ultimate vacuum (abs.)	mbar	1.5	1.5	1.5
Ultim. vac. (abs.) with gas ballast	mbar	3	3	3
Dimensions (L x W x H)	mm	415 x 243 x 444	435 x 243 x 444	435 x 361 x 444
Weight	kg	19.9	20.1	20.9
ORDERING INFORMATION				
230 V ~ 50-60 Hz	CEE	737100	737200	737300
230 V ~ 50-60 Hz	CH	737101	737201	737301
230 V ~ 50-60 Hz	UK	737102	on request *	on request *
100-120 V ~ 50-60 Hz	US	737103	737203	on request *

\*) specific mains cable on request

## THE PC 3000 VARIO™ COLLECTION

TECHNICAL DATA		PC 3001 VARIO	PC 3002 VARIO	PC 3003 VARIO	PC 3004 VARIO
Basic pump		MD 1C VARIO-SP	MZ 2C NT VARIO	MV 2C NT VARIO	MD 4C NT VARIO
Vacuum controller		CVC 3000	CVC 3000	CVC 3000	CVC 3000
Max. pumping speed	m <sup>3</sup> /h	1.7	2.8	2.8	4.6
Ultimate vacuum (abs.)	mbar	2	7	0.6	1.5
Ultim. vac. (abs.) with gas ballast	mbar	4	12	2	3
Dimensions (L x W x H)	mm	300 x 306 x 400	415 x 243 x 444	415 x 243 x 444	415 x 243 x 444
Weight	kg	7.7	17.4	20.6	20.6
ORDERING INFORMATION					
200-230 V ~ 50-60 Hz	CEE	696700	733500	738400	737500
200-230 V ~ 50-60 Hz	CH	696701	733501	738401	737501
200-230 V ~ 50-60 Hz	UK	696702	733502	738402	737502
100-120 V ~ 50-60 Hz	US	696703	733503	738403	737503

### ORDERING INFORMATION ACCESSORIES (for series PC 500 NT, PC 600 NT, PC 3000 VARIO™)

Vacuum sensor VSK 3000	636657
Cooling water valve VKW-B 24V/=	674220
Air admittance valve VB M-B	674217
Extension cable VACUU·BUS 2 m	612552
Y-adaptor VACUU·BUS	636656
Liquid level sensor for catchpot 500ml	699908

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

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Technical data are subject to change without notice