VARIO® chemistry pumping unit
MD 12C NT VARIO and PC 3012 NT VARIO

■ These VARIO® pumping units feature a very high pumping speed even close to the outstanding ultimate vacuum and are ideal for high vacuum requirements with most high boiling solvents. They provide precise vacuum control by continuously adjusting the pump´s motor speed. The controller provides fully automatic evaporations without any need for parameter input. The pump design offers exceptionally high chemical resistance supporting almost universal usage in chemistry and pharmaceutics. The PC 3012 NT VARIO pumping unit relies on a well-proven operating concept for evaporations with 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. The MD 12C NT VARIO can be equipped with these accessories later.

PERFORMANCE FEATURES

■ automatic adjustment of the vacuum level throughout the process for high process reproducibility and unattended operation

■ short process times due to zero-fluctuation (hysteresis-free) vacuum control, even for large amounts of vapor

■ easily operated CVC 3000 vacuum controller with clear text menus and integrated venting valve

■ extraordinary diaphragm life for minimum operational and servicing costs

■ PC 3012 NT VARIO: excellent environmental friendliness due to efficient solvent recovery, inlet separator for demanding applications

PC 3012 NT VARIO
12.9 m³/h
1.5 mbar

MD 12C NT VARIO
12.9 m³/h
1.5 mbar

APPLICATIONS

The high pumping speed reduces the process time and meets the high vacuum requirements, for example, of parallel operations in vacuum networks. Evaporation processes can be run fully automatically and with short process time without sacrificing sensitivity. The VARIO® control minimizes the danger of superheating and foaming and therefore ensures consistent process safety and protection of samples. With its inlet separator and efficient solvent recovery system, the PC 3012 NT VARIO is ideal for rough operating conditions. The model with Peltronic® emission condenser enables environmentally friendly solvent condensation at the outlet without external coolant.
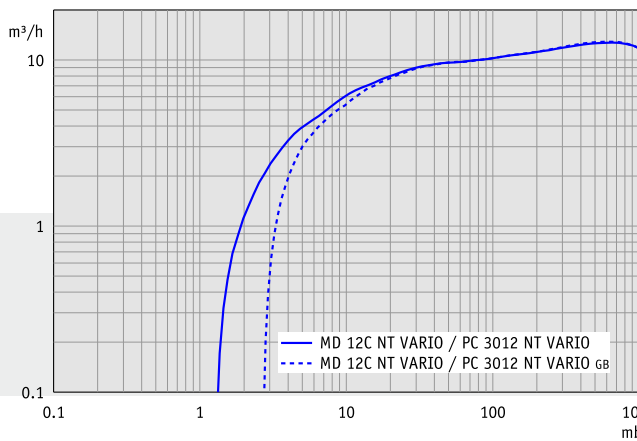
Pumping speed graph
with/without gas ballast
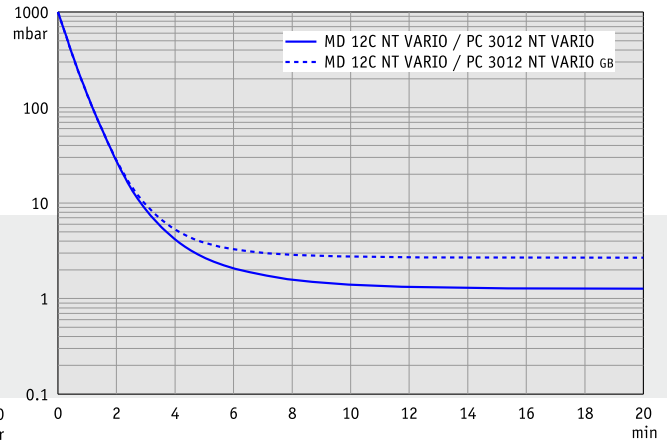
Pump down graph
with/without gas ballast
(100 l volume)

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

TECHNICAL DATA		MD 12C NT VARIO	PC 3012 NT VARIO
Vacuum controller		CVC 3000	CVC 3000
Number of heads / stages		8 / 3	8 / 3
Max. pumping speed	m³/h	12.9	12.9
Ultimate vacuum (abs.)	mbar	1.5	1.5
Ultim. vac. (abs.) with gas ballast	mbar	3	3
Max. back pressure (abs.)	bar	1.1	1.1
Inlet connection		Small flange KF DN 25	Small flange KF DN 25 / hose nozzle DN 15 mm
Outlet connection		Hose nozzle DN 15 mm	Hose nozzle DN 10 mm
Coolant connection		-	2 x hose nozzle DN 6-8 mm
Rated motor power	kW	0.53	0.53
Degree of protection		IP 40	IP 40
Dimensions (L x W x H), approx.	mm	531 x 260 x 420	616 x 387 x 420
Weight, approx.	kg	28.1	29.7

Available from June 2012
ORDERING INFORMATION MD 12C NT VARIO

200-230 V ~ 50-60 Hz	CEE	Ex*	743700
100-120 V ~ 50-60 Hz	US		743703

Ex*: ATEX: II 3G IIC T3 X, Internal Atm. only

Available from June 2012
ORDERING INFORMATION PC 3012 NT VARIO

200-230 V ~ 50-60 Hz	CEE	Ex*	743800
200-230 V ~ 50-60 Hz	CH, CN	Ex*	743801
100-120 V ~ 50-60 Hz	US		743803

Ex*: ATEX: II 3G IIC T3 X, Internal Atm. only

ORDERING INFORMATION PC 3012 NT VARIO EK Peltronic

200-230 V ~ 50-60 Hz	IEC plug EN 60320	Ex*	743814**

Ex*: ATEX: II 3G IIC T3 X, Internal Atm. only
**Please order power cable separately ▶ pg. 179

ACCESSORIES MD 12C NT VARIO
PTFE tubing KF DN 25 (1000 mm: 686033)
Inlet separator KF DN 25 (699979)
Emission condenser kit for NT pump models (699948)

ACCESSORIES PC 3012 NT VARIO, PC 3012 NT VARIO EK Peltronic
PTFE tubing KF DN 25 (1000 mm: 686033)
Rubber vacuum tubing DN 10 mm (686002)

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