

# VACUCELL

with vacuum



Laboratory drying ovens

- Temperature sensitive, easy decomposable or oxidative materials can be dried very tenderly in VACUCELL vacuum drying ovens, where there is the opportunity of extrusion of air by inert gas.
- Also complicated components with hardly accessible hollow spaces are drying quick and affectively in VACUCELL ovens.

**Volume:**

22, 55, 111 litres

**Working temperature:** 5°C above ambient temperature up to 200 °C

**Door window**

**Integrated duct for sensors etc. (Ø 40 mm)**

**Inert gas connection**

**Needle valve for fine dosing**

**Pressure resistant inner chamber**

**Safety valve-door VENTIFLEX**

**Interior:**

stainless steel, mat. No.1.4571 (AISI 316 Ti)

**The versatile standard line with microprocessor control unit**

- 3 adjustable programs
- RS 232 – interface for printer or PC-communication
- delayed heating start and stop function
- acoustic and visual alarm in error state
- time range 99 hours 59 minutes
- digital safety thermostat



**Options**

- base box Vacustation
- chemically resistant vacuum pump
- chemically resistant vacuum pump with inlet separator and exhaust condenser
- external vacuum control system
- special software WarmComm
- separate PT 100 sensor
- stainless steel casing of the devices

... standard line

**The high-tech comfort line with multi-functional microprocessor control unit**

- 6 adjustable programs
- chip card system for individual program storage
- RS 232 – interface for printer or PC-communication
- delayed heating start and stop function
- acoustic and visual alarm of error state
- time range 0–40 years with 1 min-intervals
- digital safety thermostat
- real time
- programming temperature ramps
- heating sequences
- programme cycles



**Options**

- base box Vacustation
- chemically resistant vacuum pump
- chemically resistant vacuum pump with inlet separator and exhaust condenser
- built-in vacuum control system
- special software WarmComm
- BMS relay alarm contact
- separate PT 100 sensor
- stainless steel casing of the device
- electronic measurement of pressure with indication on a display

... comfort line

Specifications		Model	22	55	111	
Interior of stainless steel material DIN 1.4571 (AISI316TI)	volume	cca litres	22	55	111	
	width	cca mm	340	400	540	
	depths	cca mm	260	320	410	
	height	cca mm	300	430	480	
Shelves	Shelves guides-impressions in the chamber side walls	number max.	5	8	9	
	number	Pieces suppl	2	2	2	
Shelves distance	height	mm	40	40	40	
Usefull dim. of shelf	width x depths	mm	280 x 236	340 x 296	480 x 386	
Max. permissible load of the shelves	one shelf	kg	20	25	25	
	totally per unit	kg	35	45	65	
External dimensions (including door and handle)	width	cca mm	560	620	760	
	depths	cca mm	490	550	640	
	height	cca mm	700	830	880	
<b>Package dimensions</b> (three layers carton)	width	cca mm	740	830	830	
	depths	cca mm	615	635	730	
	height (incl. palette)	cca mm	915	1010	1070	
Weight	netto	cca kg	65	98	130	
	brutto	cca kg	76	110,5	144,5	
<b>Electric parameters</b> – mains 50/60 Hz	max. input	kW	0,8	1,2	1,8	
	input in stand by mode	W	5	5	5	
	current	A	3,5	5,2	7,8	
	nominal voltage	V	230	230	230	
<b>Temperature data</b> Working temp (regulation start)	from 5 °C over ambient temp to °C		200	200	200	
Temp. deviations acc. to DIN 12 880 Part 2 from working temp – Al shelves pressure 5–10 mbar**	at 100 °C	accuracy in space	do ± °C	2	2	3
	at 200 °C	accuracy in time	do ± °C	<5	<6	<7
Temp. deviations acc. to DIN 12 880 Part 2 from working temp – ss shelves pressure 5–10 mbar**	at 100 °C	accuracy in time	do ± °C	0,4	0,4	0,4
	at 200 °C	accuracy in time	do ± °C	10	10	11
Time of rise onto 98 % voltage 230 V – (Al shelves pressure 5–10 mbar)	onto temp 100 °C	min	60	65	110	
	onto temp 200 °C	min	80	85	130	
Time of rise onto 98 % voltage 230 V – steel shelves, pressure 5–10 mbar	onto temp 100 °C	min	130	140	170	
	onto temp 200 °C	min	170	180	220	
Heat radiation	at 100 °C	W	150	260	370	
	at 200 °C	W	300	520	750	
Vacuum connection	vacuum connection measuring	DN mm	16	16	16	
	feedthrough needle valve for inert gas	DN mm	40	40	40	
	or air	Ø mm	8	8	8	
	chamber leakage	mbar.l.s <sup>-1</sup>	5.10 <sup>-3</sup>	5.10 <sup>-3</sup>	5.10 <sup>-3</sup>	

\* not measured

\*\* The heat in vacuum is transferred to the goods on the shelves by conduction in the shelves, therefore the mentioned temperature deviations are valid for temperatures on the surface of the shelves, there must be a perfect heat-conducting contact between the temperature sensors and the shelf surface. Goods placed on the shelves must also be in a perfect contact with the shelves, the goods temperature depends especially on their physical properties and on the contact with the shelf.



MMM Medcenter  
Einrichtungen GmbH  
Semmelweisstraße 6  
D-82152 Planegg / München

tel.: +49 89 89 92 26 20  
fax: +49 89 89 92 26 30  
e-mail: medcenter@mmmgroupp.com  
http://www.mmm-medcenter.com

