



Vaccum Oven - 'VO Series'

VACUUM OVEN VO The high-performance turbo dryer impresses with its many intelligent Memmert features for gentle drying and precise, rapid temperature control: digital pressure control, directly heated and individually controllable thermoshelves and simple programming via ControlCOCKPIT or AtmoCONTROL software. Combined together, the speed-controlled vacuum pump and the vacuum oven VO are an unbeatable energy-efficient pairing. The pump fits neatly inside the matching lower chamber.

Standard Equipment

Interior: Stainless steel, material 1.4404 (ASTM 316L), hermetically welded, with removable mountings at the sides for cleaning, including thermoshelf guide bars, as well as mounting on top to avoid turbulences

Housing: Textured stainless steel, rear zinc-plated steel, intuitively operated TwinDISPLAY (TFT colour displays) with touchscreen, safety glass door with inner bullet-proof glass and external anti-splinter screen

Connection: Mains cable with plug (German type)

Installation: 4 feet

Interfaces:



Salient Features

- Direct multi-level sensing and heating: short heating-up and processing times; individually positionable thermoshelves with integrated shelf heating and sensing
- Digital electronic pressure control

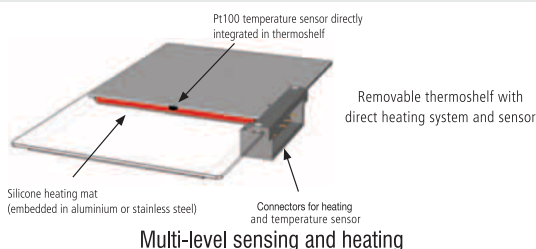


- Programmability of combined temperature / vacuum cycles
- Programmability of switching ventilation inert gas / fresh air
- Simple programming via ControlCOCKPIT or AtmoCONTROL software

Vaccum Oven VO (29 to 101 litres)



Model sizes/Description			29	49	101
Stainless steel interior	Volume	approx. l	29	49	101
	Width (A)	mm	385		545
	Height (B)	mm	305	385	465
	Depth (C)	mm	250	330	400
	Distance between thermoshelves	mm	75		95
	Maximum load per oven	approx. kg	40	60	
	Max. number of thermoshelves	number	1	2	
	Max. number of thermoshelves (with premium module)	number	2	4	
	Max. loading per thermoshelf	kg	20		
	Textured stainless steel exterior	Width (D)	mm	550	
Height (E)		mm	607	687	767
Depth (without door handle, depth of handle 38mm) (F)		mm	400	480	550
Safety glass door: Textured stainless steel frame with spring-loaded safety glass on inside and anti-splinter screen ESG on outside of door				●	
Door Seal: Endless silicone profile seal				●	
Standard equipment	Thermoshelves – aluminium eloxadised, mat. 3.3547 (ASTM B209) – with integrated large-area heating including local temperature sensing (Pt100, 4-wire-circuit); individual overtemp. protection for each shelf. Further data see stainless steel number inner working chamber	number	1		
	Works calibration certificate (measuring point in the middle of the individual shelf for +160 °C at 20 mbar pressure): a separate certificate is prepared for each thermoshelf ordered and shipped together with the vacuum oven	°C	●		
Temperature	Temperature sensors Pt100 Class A in 4-wire circuit individually for each thermoshelf		●		
	Working temperature range	°C	at least 5 above ambient temperature to +200		
	Setting temperature range	°C	+20 to +200		
	Setting accuracy	°C	0.1 for setpoint and actual value		
	Temperature variation in time (to DIN 12880:2007-05) (aluminium thermoshelf)	K	≤ ± 0.3		
	Temperature uniformity (surface) at +160 °C/20 mbar (aluminium thermoshelf)	K	≤ ± 2		
Pressure (vacuum)	Vacuum connection with small flange DN16, and gas inlet with small flange DN 16		●		
	Digital electronic pressure control for a speed-controlled vacuum pump. Tubing for vacuum, air and inert gas are made of material 1.4571 (ASTM 316 Ti). Adjustable from 5 mbar up to 1100 mbar. Programmable, digitally controlled inlet for air.		●		
	Pump control: optimised rinsing procedures for the pump membranes as well as signal output for pump ON/OFF		●		
	Rapid air intake for door opening without alteration of selected vacuum setpoint		●		
	Permitted final vacuum	mbar	0.01		
	Maximum leakage rate	bar/h	0.01		
	Control technology	Digital over- and undertemperature monitor		●	
Temperature monitoring band automatically linked to the setpoint (ASF)			●		
Multi-Level-Overtemperature-Protection (MLOP) for each thermoshelf			●		
Monitor relay for reliable heating cut-off in case of fault			●		
Mechanical temperature limiter (TB)			●		
Further data	Subframe tubular steel (extra cost), black enamelled (for stacking unit consisting of vacuum oven and pump module, total height: 1650 mm, see sketch of oven dimensions) Width/Height/Depth	mm	529/450/383	529/290/463	689/130/533
	Electrical load (loading with max. number of thermoshelves) at 230 V, 50/60 Hz	approx. W	420	1020	1220
	Electrical load with premium module (loading with maximum number of thermoshelves) at 230 V, 50/60 Hz	approx. W	820	2020	2420
Packing data	Net weight	approx. kg	55	83	110
	Gross weight (packed in carton)	approx. kg	76	104	135
	Packed dimensions Vacuum oven (Width, Height, Depth)	approx. mm	660/870/590		830/1050/800
	Net weight pump module without/with pump	approx. kg	25/41	30/46	41/57
	Gross weight pump module without/with pump (packed in carton)	approx. kg	46/62	51/67	66/82
	Packed dimensions pump module (Width, Height, Depth)	approx. mm	660/870/590		830/1050/800
Order No. Vacuum Ovens		VO29	VO49	VO101	



Accessories

1. Additional thermoshelf stainless steel material / aluminium eloxadised
2. USB user ID stick
3. Noise insulated vacuum pump module
4. Software conforming to FDA AtmoCONTROL

Options

- Premium module
- Flexible Pt100 sensor
- MobileALERT

product range

- | Ovens
- | **Vaccum Ovens**
- | Constant Climate Chambers
- | Water & Oil Baths
- | Incubators
- | Peltier Cooled Incubators
- | Humidity Chambers
- | Clean Room Drying Ovens
- | Sterilisers
- | CO₂ Incubators
- | Stability Test Chambers
- | Pass Through Ovens

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