

# Vacuum oven VO Energy-efficient, gentle, high-speed

Model sizes: 29, 49, 101

Setting range: Temperature: up to +200 °C | Vacuum: 5 to 1100 mbar Accessories: speed-controlled vacuum pump and pump base cabinet



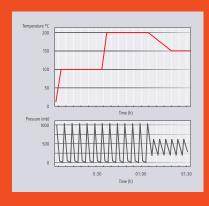
In combination with the speed-controlled vacuum pump, the VO series saves around 70 % energy compared with an uncontrolled pump. Each Memmert vacuum oven comes with convenient TwinDISPLAY features such as the clearly laid out ControlCOCKPIT touchscreen control unit and the latest state-of-the-art control technology.

# Highlights of the new Memmert vacuum oven VO:

- Speed-controlled, energy-efficient vacuum pump (optional) with an ultimate vacuum of up to 2 mbar
- Much longer service life for pump membrane thanks to optimised, needs-based rinsing
- Digital pressure control
- Directly heated, separately controlled thermoshelves
- ControlCOCKPIT with two displays for adjusting temperature and pressure as well as for displaying all status messages
- Programming via AtmoCONTROL control and protocol software
- Premium module includes the option for switching to inert gas (digitally controlled gas inlet with flow reduction; except for VO29), the MobileALERT option (separate error messages for temperature and pressure), and additional thermoshelves or thermoshelf connections depending on the appliance size



Vacuum oven VO29 with pump module



Example of ramp programming

#### New design. As precise and gentle as ever.

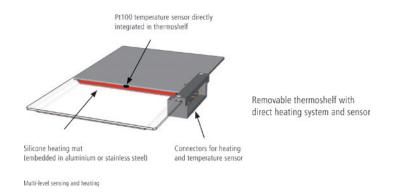
The perfect balance between the latest technology and decades of experience makes the VO a reliable and versatile all-rounder for vacuum drying applications.

## Optional vacuum pump saves around 70 % energy

The speed-controlled, chemical-resistant Memmert vacuum pump is automatically detected by every vacuum oven VO. Its intelligent speed control ensures high-precision adjustment based on the setpoint. There are also benefits in terms of energy efficiency, with measurements in ramp mode showing energy savings of around 70 % compared with uncontrolled vacuum pumps — and even bigger savings are possible at constant vacuum levels. The ultimate vacuum of up to 2 mbar supports a wide range of applications, while the needs-based pump control considerably extends the membranes' service life. If another vacuum pump or a central vacuum supply is connected, the vacuum is controlled via solenoid valves.

#### The Memmert VO direct heating system

Intelligent direct heating via individually placeable thermoshelves with separate sensors guarantees very short heating and process times. The control circuits react precisely to different loads or humidity and maintain a constant setpoint temperature during vacuum drying. Thanks to the direct contact between the heating and the chamber load, practically no heat loss occurs. Each thermoshelf can be individually calibrated.



### Turbo drying thanks to vacuum cycles

Digitally controlled vacuum cycles, in which the working area is vented at short intervals, result in further considerable reductions in drying times. The AtmoCONTROL software supports quick and easy programming of ramps with different temperature and vacuum setpoints.

For detailed technical information, please see the Memmert heating and drying oven brochure or visit www.memmert.com/en/vo.