

Model JSVO-30T Vacuum Oven



Vacuum Drying Oven is suitable for drying out liquids or solvents contained in a samples or materials in vacuum environment to achieve low heat of vaporization or sublimation point.

Ideal for Vacuum Distillation, Vacuum Sublimation or Vacuum Drying application of material science or electronic parts and assemblies.

Also suitable for drying out fine powders in vacuum environment without air convection to prevent diffusion of such samples.

Drying, curing, de-gassing, aging, removing moisture or solvent from fine powder or solid material, accelerating drying time, drying temperature sensitive material, drying in anaerobic condition, remove solvent from DNA, RNA or protein, drying unidentified material characteristic.

MAIN FEATURES

PERFORMANCE

- Heater from side wall transduces heat through aluminum shelf to maintain uniform temperature over the surface of shelf
- Class A Pt-100Ω sensor embedded into the aluminum shelf to measure accurate temperature of the shelf
- 50mm thick high thermal efficiency mineral wool with woven aluminum barrier sheet saves energy and less dust

CONTROLLER

- ± 0.1 °C Digital PID Controller with LED Display
- Automatic START/STOP timer
- Adjustable timer scale 99min 59sec / 99hr 59min / 99 day 23hr or continuous operation
- Temperature calibration
- Auto-tuning function
- Class A Pt-100Ω sensor

CONSTRUCTION

- Durable epoxy powder coated metallic casing
- Corrosion resistant Electro-Polished Stainless Steel 304 chamber
- 15 mm thick tempered safety glass window for easy observation of samples and window grill for safety

CONVENIENCE

- Corrosion resistant Stainless Steel 304 (ASTM 304) solid chamber interior
- Door with 15mm thick tempered safety glass window with safety grill
- Vacuum tight high density one-piece silicone door gasket
- Air tight one touch door latch
- Two tier aluminum shelf
- Equipped with Vacuum Gauge ~ 760 mmHg
- Two way valve to control vacuum and lock
- Adjustable needle valve for fine control of vent speed

SAFETY

- DUAL OVER TEMP. CUT-OFF
Digital system cut-off heater and AUDIO VISUAL ALARM in case +2 °C above set temperature
Analog system cut-off heater 10% above set temp.
- MAX TEMP CUT-OFF heater and AUDIO VISUAL ALARM when +1 °C above maximum limit
- SENSOR DISCONNECTION ALARM
- OVER CURRENT CUT-OFF : Electrical Leakage Breaker

SPECIFICATIONS**DESCRIPTIONS****JSVO-30T****Dimension Data**

Chamber Volume	27 Liters
Inner Dims. (W x D x H mm)	300 x 300 x 300
Outer Dims. (W x D x H mm)	665 x 470 x 535
Window Dims. (W x H mm)	265 x 285
No. of Shelf included	2 ea
Shelf Height	100 mm

Performance Data

Heating System	Heat transduction through aluminum shelf
Temp. Range	Amb. +10 °C ~ +250 °C
Accuracy at 120 °C (shelf surface)	±2.0 °C
Uniformity at 120 °C (shelf surface)	±3.0 °C
Heat up time to 120 °C	30 min.
Vacuum (Max.)	760 mm Hg

Controller

Processor	Digital Microprocessor PID Temperature Controller
Display	4 Digit LED Display
Temp. Calibration	Built-in Temperature Calibration Auto-tuning
Temp. Resolution	0.1 °C
Timer Scale	99 min 59 sec / 99 hr 59 min / 99 dy 23 hr
Turn-On Delay Time	Automatic START/STOP timer / Continuous Operation
Sensor	CLASS A PT-100 Ω Sensor

Safety Data

Safety Device	DUAL OVER TEMP. CUT-OFF Digital system cut-off heater and AUDIO VISUAL ALARM Analog system cut-off heater 10% above set temp. MAX TEMP CUT-OFF heater and AUDIO VISUAL ALARM CUT-OFF heater and blower when door opened SENSOR DISCONNECTION ALARM Over Current CUT-OFF
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Material Data

Body	Epoxy Powder Coated Steel
Chamber	Electro-Polished Stainless Steel 304, 3.0 mm thickness
Shelf	Anodized Aluminum, 3.0 mm thickness
Insulation	50 mm Woven Mineral Wool
Fittings	Vacuum / Vent : Ø 11 mm hose barb
Valves	2-Way Vacuum/Lock Valve Needle Valve for ventilation speed control

Electrical Data

Rated voltage	220 ± 10% VAC
Power frequency	50 / 60Hz
Heater Output	2.0 kW (2 x 1.0 kW)
Nominal power	2.1 kW 9.5 amp
Phase	1 Phase
Plug configuration	CEE 7/7 Schuko or BS 1363

Usable Condition

Temp. & Humidity	5°C - 40 °C, < 80% RH
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Packaging Data

Type of packaging	Carton on a wooden palette
Shipping Dims. (W x D x H mm)	690 x 500 x 580 mm
Net Weight	53.0 kg
Shipping Weight	57.0 kg

ORDERING INFORMATION

Art. No.	Descriptions	Voltage
JSVO-30T	Vacuum Oven, 27 L including 2 ea x Aluminum Shelf	220 VAC 1~ ph 50/60Hz

OPTIONAL ACCESSORIES

Art. No.	Descriptions
PHS-A91	Aluminum Shelf, W295 x D250 mm for JSVO-30T
OHG-001	Glass Trap, 500 ml, Ø60 x H280 mm
OHV-001	High Vacuum Hose, Inner Ø9 mm x Outer Ø24 mm, 1 Meter
W2V10	Rotary Vane Vacuum Pump 100L/min, 5x10 ⁻⁴ Torr, 220VAC 50/60Hz, 400W
WOF-15(PC)	Oil Mist Trap, Polycarbonate Housing
NW25-Ø12	Hose Nipple, Ø12 mm
NBR/NW25	Center Ring, Ø25 mm
NW25	Clamp, Ø25 mm
MZ 2C NT	Chemistry Diaphragm Pump 2.0 m ³ /h, 7 mbar, 220VAC 50/60Hz, 180W
JSCT-35C	Cold Trap Bath, -35°C
JSCT-55ULT	ULT Cold Trap Bath, -55°C
JSCT-85ULT	ULT Cold Trap Bath, -85°C

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