

Technical data sheet

Glass Oven G-300

The instrument is known for its versatility in lab applications like drying, sublimation, freeze-drying, and distillation, making it essential universal equipment with customizable options. It features an innovative gentle heating technique with a semi-conductor coating for even heat distribution, speeding up the process and allowing real-time sample monitoring to prevent thermal damage.



Scope of delivery

All configurations are supplied ready to use.



NOTE

The scope of delivery depends on the configuration of the purchase order.

Accessories are delivered as per the purchase order, order confirmation, and delivery note.

Components	Glass Oven G-300	Glass Oven G-300
	Drying	Kugelrohr
Glass Oven G-300	1	1
Drying tube	1	-
Glass ball incl. stop cock	1	-
Aluminum flange ring	1	-
Flange nut incl. spring	1	-
Drive unit	-	1
Cooling device	-	1
Suction angle	-	1
Rotation drying flask 30 mL	-	1
Ball tube with 3 balls of 20 mL	-	1
Power cable	1	1

Order code

Choose the configuration according to your needs:



Glass Oven G-300 (100-230 V)

- 0 Without only the main unit for reusing the existing accessories
- 1 Drying incl. main unit and Drying accessory
- 2 Kugelrohr incl. main unit and Kugelrohr accessory

Technical data

Glass Oven G-300

Specification	Glass Oven G-300 Drying	Glass Oven G-300 Kugelrohr
Dimensions (W \times D \times H)	400 mm × 180 mm × 295 mm	750 mm × 190 mm × 805 mm
Weight	6.0 kg	7.6 kg
Volume	up to 250 mL (sample vol.)	5-40 mL (flask size)
Adjustable angle	0-90°	0-90°
Rotation speed range	_	0–100 rpm
Connection voltage	100-240 VAC ±10%	100-240 VAC ±10%
Frequency	50 / 60 Hz	50 / 60 Hz
Power consumption	600 W	600 W
Fuse	3.15 AT	3.15 AT
Overvoltage category	II	II
IP Code	IP21	IP21
Pollution degree	2	2
Minimum clearance on all sides	300 mm	300 mm
Display type	3" Dark segment display	3" Dark segment display
Temperature range	up to 300 °C	up to 300 °C
Temperature precision	±5°C	±5°C
Temperature adjustment accuracy	±1°C	±1°C
Warm-up time (from 20 to 300 °C)	approx. 10 min	approx. 10 min
Certificate	CB, CE, UL / CSA	CB, CE, UL / CSA

Ambient conditions

For indoor use only.

Specification	Value
Max. altitude above sea level	2,000 m
Ambient and storage temperature	5-40 °C
Max. relative humidity	80% for temperatures up to 31 °C decreasing linearly to 50% relative humidity at 40 °C

Spare parts and accessories

Use only genuine BUCHI consumables and spare parts in order to ensure correct, safe and reliable operation of the system.



NOTE

Any modifications of spare parts or assemblies are only allowed with the prior written permission of BUCHI.

Accessories

	Order no.	lmage
Kugelrohr accessory	11082306	'
Complete ball tube drive for converting to a ball tube distillation oven (Kugelrohr). Incl. cooling device, drive unit, and suction angle.		
Drying accessory	037010	<u>.</u>
For converting to the drying model. For sample volumes up to 250 mL. Incl. drying tube, glass ball, stopcock, flange ring, spring, and O-ring		
Freeze drying accessory. Incl. glass tube, screw cap, O-ring	046710	
For freeze drying applications. Meant to be used with the drying accessory and either a condenser or cold trap.		6
Sublimation accessory. Incl. sublimation finger	036766	
Meant to be used with the drying accessory.		
Sublimation accessory. Incl. drying tube, glass tube, sublimation finger, stopcock, flange ring, O-ring	037133	
For conversion to the sublimation configuration		
Rotation drying flask. Glass, 30 mL, SJ14/23	037143	
Content: Drying flask, vapor duct, clip		
Ball tube. Glass, 10 mL (4 pcs), SJ14/23	037118	
Content: Ball tubes, vapor duct, clips		
Ball tube. Glass, 20 mL (3 pcs), SJ14/23	037107	
Content: Ball tubes, vapor duct, clips		

	Order no.	Image
Ball tube. Glass, 40 mL (2 pcs), SJ14/23 Content: Ball tubes, vapor duct, clips	037117	
End bulb spec. D 40mm Content: End ball tube	11061825	
Condenser V. Vertical condenser, 1500 cm², Safety Coating For distillations and freeze drying application. Used with recirculating chiller or tap water. Content: 250 mL receiving flask, ball joint clamp, vacuum connection (Safety Coating).	046711	
Condenser C. Cold trap, 500 cm ² , Safety Coating For freeze drying application and for distillations of low-boiling point solvents. Content: 250 mL receiving flask, ball joint clamp, vacuum connection (Safety Coating).	046712	
Cooling unit. Incl. cooling tray For substances with a low boiling point, to condense the vapor in the balls outside of the oven area. Cooling tray can be filled with e.g. ice water or dry ice.	11080855	
Communication cable, Mini-DIN, 0.6 m	11060882	
Cable. Mini-DIN, 1.5 m Connection between glass oven and vacuum pump that does not have a COM connection.	038010	

Wear parts

	Order no.	Image
O-ring. NBR, Ø 50.4 mm	002797	
For the drying accessory and the sublimation glass assembly.		
Vacuum gasket. Shaft seal ring, NBR, Ø 10/24 mm Used in fixation nut to attach stopcock to Kugelrohr drive unit (046765).	002862	

	Order no.	lmage
Vacuum gaskets, set. 5 pcs, shaft seal ring, NBR, Ø 10/24 mm	037288	
Hose barb, bent, GL 14, incl. silicone seal	018916	
Hose barbs, set. 4 pcs, bent GL 14, silicone seal Content: Hose barbs, cap nuts, seals	037287	TO T
Cap nut GL14	033577	
Hoses		
	Order no.	lmage
Tubing, silicone, Ø 6/9 mm, transparent, per m Use: Cooling media	004133	
Spare parts		

Main unit

	Order no.	lmage
Handhold for angle adjustment	046633	

	Order no.	Image
Heating glass, coated	037026	THE T
Protection glass 230 × 80 mm	002961	
Pt1000 temperature sensor	031299	
Fuses, set. 10 pcs. T 3.15A H 250V (100–240 V), 20 mm, Ø5 mm	019659	
Navigation control knob	11074581	
Knurled screw M5	046683	

Drying

	Order no.	lmage
Glass ball Incl. cap nut GL14, Olive bent GL14 Si.	036765	
Drying tube 230 × 50 mm	002965	
Aluminum flange ring 68.5 × 29 mm To attach drying tube to the instrument.	002970	
Insert spring	000590	
Flange nut TR 68 × 3 mm To attach glass ball to drying tube.	036848	
Flange nut set cpl. Incl. flange nut, insert spring, O-ring	037285	

	Order no.	lmage
Stop cock STJ18.8/26	037132	
Drying flask 5 mL 270 pcs.	003007	
Holder for flasks	003006	
Holder with glass tubes cpl. Incl. holder, 5 mL flask set. 270 pcs	001981	

Freeze-drying

	Order no.	Image
O-ring D 30.00 × 4.00 EPDM 70ShA	037179	
Screw cap SVL 30	005223	

Kugelrohr

	Order no.	Image
Drive unit cpl.	11082309	
Incl. motor unit, cap nut, clamping cone, guiding tubes, cable		

	Order no.	lmage
Cooling tray	11081778	
For substances with a low boiling point, to condense the vapor in the balls outside of the oven area. Cooling tray can be filled with e.g. icewater or dry ice.		
Cap nut. Ø 20/35 mm, black	036824	
Clamping cone	036770	
Suction angle cpl.	040461	
Incl. connection cock 3-Way GL14, nut, stop cock, gasket NBR, insert spring.		
Connection cock 3-Way GL14	036771	
Incl. cap nut GL14, Olive bent GL14 Si.		
Stop cock STJ18.8/26	037132	
Insert spring	002859	
For suction angle cpl. (040461)		

	Order no.	lmage
Iris diafragm cpl.	046605	
Rotation drying tube 30 mL	036480	
End bulb 10 mL	037101	
End bulb 20 mL	037104	
End bulb 40 mL	036478	
Bulb with 2 openings 10 mL	037102	
Bulb with 2 openings 20 mL	037106	

	Order no.	lmage
Bulb with 2 openings 40 mL	036479	
Vapor duct 14/23 For ball tubes.	037073	
Vapor duct 24/29 For rotation flask.	037125	
Set Clamp SJ14.5 (5pcs) Incl. clamps SJ14.5 (5 pcs).	040893	
Set Ns-Clamps Incl. clamps SJ14.5 (5 pcs), clamps SJ19 (5 pcs), clamps SJ24 (2 pcs).	037286	
Clamp SJ24	037479	
Knurled screw M5	046683	

Consumables

Lab grease. Glisseal 40 (30 g)

To grease joints in order to increase tightness of system.



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Quality in your hands