

Electric Furnaces | Standard

FO101C/111C/201C/211C/301C/311C/411C/511C/611C/711C/811C

Operating temp. range	100~1150°C	Temp. adjusting accuracy	±2°C	Internal capacity	1.5L	3.75L	7.5L	9L	11.3L	17.5L	23.6L	30L
-----------------------	------------	--------------------------	------	-------------------	------	-------	------	----	-------	-------	-------	-----

8 types of internal capacity, equipped with program operation function.

Features

- Support program operation.
- Simple operation with up/down key settings, equipped with a high-operability controller for precise temperature control.
- Temperature, time and indicator values can all be displayed digitally.
- Use a controller with integrated digital settings and overheat protection. Support self-diagnosis functions, overcurrent leakage protection switch and other safety controls in case of anomalies.
- Use R-type thermocouple for long life.
- Equipped with an exhaust port.
- Optional features available, such as exhaust unit, sample trays, nitrogen gas introduction device (with flow meter), temperature output terminal and so on.



Specifications

Model		FO101C	FO111C	FO201C	FO211C	FO301C	FO311C	FO411C	FO511C	FO611C	FO711C	FO811C										
Performance	Operating temp. range	100~1150°C																				
	Temp. adjusting accuracy	±2°C (at 1150°C)																				
Composition	Time to reach maximum temp. at room temp.	Approx. 60 min				Approx. 70 min			Approx. 80 min													
	Exterior material	Double-sided galvanized steel sheet, with surface paint treatment																				
	Furnace body	Ceramic fiber																				
	Sensors	Dual R-type thermocouple																				
Controllers	Heater	Iron-chromium-aluminum alloy electric heating wire heater			1kW			1.5kW		2kW		2.2kW		2.5kW		3kW		3.5kW		4kW		
		Exhaust vent: Inner diameter 20mm, upper part																				
	Cooling fan blade	Axial flow fan																				
	Temp. control method	The heater output is controlled using a microcomputer PID controller																				
	Temp. setting/display	Digital setting through function menu key and ▲/▼ keys																				
	Overheating protection	Integrated controller																				
	Overheat protection setting method	Digital setting																				
	Operation functions	Fixed temp. operation, program operation, auto start, quick auto stop, auto stop, programmable controller with 3 modes (30 segments×1, 15 segments×2, 10 segments×3)																				
	Additional functions	Deviation correction function, power failure compensation function, key lock function																				
	Timer	1 min~99 h 59 min and 100~999 h 50 min (including timer function)																				
Safety device		Self-diagnostic: Temperature sensor malfunction, display malfunction, automatic overheat prevention malfunction, measured temperature malfunction, leakage protection switch, overheat prevention device (controller integrated electronic type)																				
Specifications	Internal dimensions (W×D×H mm)	100×150×100			100×250×150			200×250×150			200×300×150		300×250×150		250×350×200		270×350×250		300×400×250			
	External dimensions (W×D×H mm)	346×405×517			346×505×567			446×505×567			446×555×567		506×505×627		506×605×677		506×605×727		506×655×727			
	Internal capacity	1.5L			3.75 L			7.5 L			9 L		11.3 L		17.5 L		23.6 L		30 L			
	Power supply (50/60Hz) rated current	AC115V 10A		AC220V 5A		AC115V 14.5A		AC220V 7A		AC115V 19A		AC220V 9.5A		AC220V 10.5A		AC220V 12A		AC220V 14A		AC220V 16.5A		AC220V 18.5A
Weight	Approx. 24kg			Approx. 30kg			Approx. 37kg			Approx. 38kg		Approx. 44kg		Approx. 52kg		Approx. 58kg		Approx. 62kg				
Accessories		Insulating cover 1 pcs																				
Options	Stand	ON30C						ON61C														
	Others	Setter plate, exhaust unit (AC220V), sample box, N ₂ introduction device (with flow meter), mini printer, data logger, combination warning light (standby/operation/failure), external communication function (RS485), temperature output terminal (4~20mA), external alarm output terminal, time-up output terminal, central monitoring software																				

1 Sterilizers

2 Granulation and Spray Dryers

3 Furnaces

4 Ovens

5 Incubators

6 Plasma Equipment

7 Water Purifiers

8 Baths

9 Water Circulators

10 Rotary Evaporators

11 Stirrers & Shakers

12 Options

Automatic Overheating Preventer

Overheat Preventer

Self-diagnostic Function

Key Lock Function

Power Failure Compensation Function

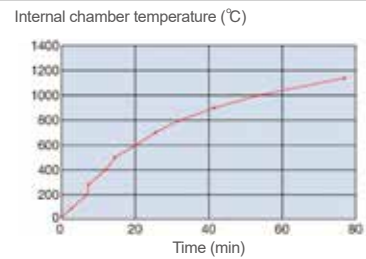
Overcurrent Leakage Circuit Breaker



Control panel



Temperature rise characteristic curve (FO301C/FO311C)



Exhaust device unit (optional)



Able to quickly exhaust gases generated by rising temperature inside the chamber.
 Piping: flexible pipe, aluminum
 Length 1.5m
 Diameter 50mm
 Exhaust unit power:
 Single phase AC220V 0.15A

Internal chamber



Improved thermal insulation features and temperature distribution accuracy by adopting a reasonable thermal insulation structure.

External temp. output terminal (optional)

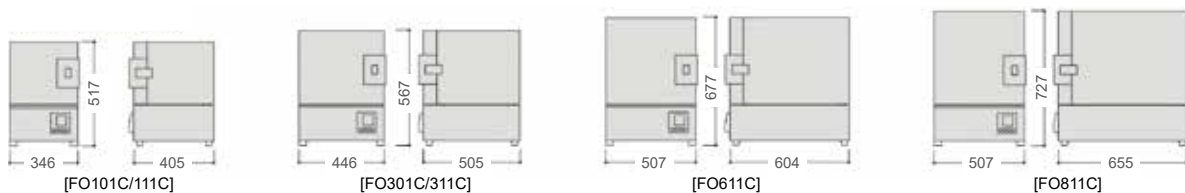


- Time-up output
Output at auto stop and program end
- Measured temperature transmission output
For recording and monitoring internal chamber temperature.
Temperature output: 4~20mA

Sample tray (optional)



Dimension diagram (mm)



Sterilizers	1
Granulation and Spray Dryers	2
Furnaces	3
Ovens	4
Incubators	5
Plasma Equipment	6
Water Purifiers	7
Baths	8
Water Circulators	9
Rotary Evaporators	10
Stirrers & Shakers	11
Options	12