

## Thermolyne Furnaces



# Benchtop Muffle



Type F47900 and F48000

## Perfect for General Laboratory Use!

- 120 or 350 cubic inch capacities
- 1200°C max. temperature
- Built in venting system



SH480X1 - Ceramic shelf for Type  
F480000 Furnace

### Product Description

- Two chamber sizes:  
Type F47900 offers 120 cubic inches of heating area.  
Type F48000 provides 350 cubic inches of heating area; a ceramic shelf is included to double furnace load capacity (SH480X1).
- Open coil heating elements on both sides of chamber assure fast heat-up, with minimum temperature gradient.
- Maximum energy efficiency is achieved by surrounding the chamber with thermal-efficient ceramic insulation.
- The rear of the chamber incorporates a 0.38" (0.95 cm) diameter port for monitoring chamber temperatures with independent measuring devices.
- All models shipped complete with power cord.

### Operation

- Built-in venting system removes undesirable contaminants and moisture; extends the life span of the element and unit.
- Four temperature controller models:  
**A1:** Digital single set point control. A single display shows actual temperature or set point.  
**B1:** Digital single set point control with a single ramp to set point and a dwell. A single display shows actual temperature or set point. The furnaces that use this control also utilize a mechanical Over Temperature Protection relay.

**C1:** Digital programmable control with one stored program of 8 segments. The furnaces that use this control also utilize a mechanical Over Temperature Protection relay.

**D1:** Digital programmable control with 4 stored programs, 16 segments per program. The controller also includes RS232 communications. The furnaces that use this control also utilize a mechanical Over Temperature Protection relay.

- All units include a thermocouple, grounded three-wire cord, and plug.

\* For Calibration Verification System, see Pyrometers.

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### Safety

- Door safety switch protects operator by removing power to the heating elements upon opening the door.
- Thermocouple break protection cuts power to the heating elements, prevents a thermocouple failure runaway condition.

### Applications

- Organic and inorganic ashing
- Gravimetric analysis
- Sintering
- Quantitative analysis

### PRODUCT SPECIFICATIONS

Type	Chamber Dimensions Inches (cm)			Overall Dimensions Inches (cm)			Chamber Cubic Inches (liters)	Shipping Weight Lb. (kg)
	W	H	D	W	H	D		
F47900	5 (13.7)	4 (10)	6 (15)	11.3 (28.5)	18.5 (47)	15.5 (39)	120 (2.0)	41 (18.5)
F48000	7 (18)	5 (13)	10 (25)	13.3 (34)	19 (49)	19.5 (50)	350 (5.8)	60 (27.2)
			Uniformity at 1000°C			Stability at 1000°C		
F47900 (chamber)			± 4.8°C			±0.4°C		
F48000 (chamber)			± 3.6°C			±0.2°C		

### ORDERING INFORMATION

Model #	Electrical (50/60 Hz)			Operating Range Temp		Temp Control Group	US List Price	Model #	Electrical (50/60 Hz)			Operating Range Temp		Temp Control Group	US List Price
	Volts	Amps	Watts	°C	°F				Volts	Amps	Watts	°C	°F		
F47915	120	8.3	1000	100-1200	212-2192	A1	\$1,442.00	F48025*	120	15.0	1800	100-1200	212-2192	B1	\$2,597.00
F47910-26	240	4.2	1000	100-1200	212-2192	A1	\$1,442.00	F48028	208	7.5	1560	100-1200	212-2192	B1	\$2,597.00
F47910-33'	240	4.2	1000	100-1200	212-2192	A1	\$1,442.00	F48020	240	7.5	1800	100-1200	212-2192	B1	\$2,597.00
F47925	120	8.3	1000	100-1200	212-2192	B1	\$2,184.00	F48020-33'	240	6.5	1560	100-1200	212-2192	B1	\$2,597.00
F47920	240	4.2	1000	100-1200	212-2192	B1	\$2,184.00	F48025-60	120	15.0	1800	100-1200	212-2192	B1	\$3,080.00
F47920-33'	240	4.2	1000	100-1200	212-2192	B1	\$2,287.00	F48025-80	120	15.0	1800	100-1200	212-2192	C1	\$3,070.00
F47925-80	120	8.3	1000	100-1200	212-2192	C1	\$2,771.00	F48025-60-80	120	15.0	1800	100-1200	212-2192	C1	\$3,080.00
F47920-80	240	4.2	1000	100-1200	212-2192	C1	\$2,771.00	F48028-80	208	7.5	1560	100-1200	212-2192	C1	\$3,070.00
F47920-33-80'	240	4.2	1000	100-1200	212-2192	C1	\$2,771.00	F48020-80	240	7.5	1800	100-1200	212-2192	C1	\$3,070.00
F47955	120	8.3	1000	100-1200	212-2192	D1	\$3,544.00	F48020-33-80'	240	6.5	1560	100-1200	212-2192	C1	\$3,070.00
F47950	240	4.2	1000	100-1200	212-2192	D1	\$3,544.00	F48055	120	15.0	1800	100-1200	212-2192	D1	\$3,864.00
F47950-33'	240	4.2	1000	100-1200	212-2192	D1	\$3,544.00	F48055-60	120	15.0	1800	100-1200	212-2192	D1	\$3,874.00
F48015	120	15.0	1800	100-1200	212-2192	A1	\$1,723.00	F48058	208	7.5	1560	100-1200	212-2192	D1	\$3,864.00
F48015-60	120	15.0	1800	100-1200	212-2192	A1	\$1,723.00	F48050	240	7.5	1800	100-1200	212-2192	D1	\$3,864.00
F48018	208	7.5	1560	100-1200	212-2192	A1	\$1,723.00	F48050-33'	240	6.5	1560	100-1200	212-2192	D1	\$3,864.00
F48010	240	7.5	1800	100-1200	212-2192	A1	\$1,723.00	<i>-60 Models include 20-amp cord. F47900 depth with door open is 22 inches (56 cm). F48000 depth with door open is 27 inches (68.5 cm).</i>							
F48010-33'	240	6.5	1560	100-1200	212-2192	A1	\$1,723.00								

<sup>1</sup> CE marked.

\* Models are not CSA Listed.

### ACCESSORIES

Model #	Description	Overall Dimensions			US List Price
		W	H	Inches (cm) D	
SH480X1	Ceramic Shelf for Type F48000 Furnace	6.8 (17.3)	.48 (1.2)	6.87 (17.4)	\$40.60
PH479X1	Hearth Tray for F47900	5.6 (14.3)	.38 (.95)	6 (15.2)	\$18.10
PH480X1	Hearth Tray for F48000	7.6 (19.3)	.38 (.95)	10 (25.4)	\$31.50

For Calibration Verification System, see pyrometers.