

Furnaces

- Digital PID Control System
- Max. Temperatures are 1,000°C (F-/FP-model) or 1,200°C (FH-/FHP-model)
- 4-Side Heating Mechanism ensure the Short Heat-up Time and High Temperature Uniformity
- Users Self-Compensation function for Temperature
- Patented Jog-Shuttle Control system and Digital LCD with Back-light Function
- PL (Product Liability) Insurance

- **Digital Muffle Furnaces** P. 52, 54
- **Programmable Digital Muffle Furnaces** P. 53, 55

❖ **Digital Muffle Furnace**
1,000°C / 1,200°C (F/FH-model)



❖ **Programmable Muffle Furnace**
1,000°C / 1,200°C (FP/FHP-model)



witeg® I, 200°C Digital Muffle Furnaces, "FH", Exposed Heating Elements-type, with Certi. & Traceability with Digital PID Control, Short Heat-up Time, Ceramic Fiber, 4-Side Heating, with Ceramic Fiber Plate, 3~63 Lit.



1200°C Digital Muffle Furnace, Exposed Heating Elements-type "FH-14"

- with Certificate & Traceability :
Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System
- Patented Jog-Dial Control System and Digital LCD with Back-Light Function
- CE Certified ■ PL (Product Liability) Insurance

- * Digital Jog-Dial Control System
- * Included Ceramic Fiber Plate
- * User's Self-Compensation Function for Temperature (±50°C)
- * Resolution : 1°C, 1min
- * Safety Switch for Door Opening
- * Ceramic Fiber Exposed Heating Wire, 4-Side Heating

Specification

Capacity & Model and Temp. Range	3 Lit. "FH-03"	4.5 Lit. "FH-05"	12 Lit. "FH-12"	14 Lit. "FH-14"	27 Lit. "FH-27"	63 Lit. "FH-63"	
	300°C ~ 1200°C						
Heater	Kanthal A1, Embedded Wire Heating Elements, 4-Side Heating						
Thermocouple	K-type Thermocouple						
Heating Power	1.4 kW	1.8 kW	3.6 kW	4.0 kW	4.6 kW	9 kW	
Required time to be reached 800°C	16 min		20 min			23 min	
Timer & Alarm	99hr 59min (Delay & Continuous run), Error status & Timer-end						
Display	Digital LCD with Back-Light Function						
Controller	Digital PID Controller with Jog-Shuttle Switch (Turn+Push)						
Safety Circuit	Over-Temp./-Current protection, Sensor Error Detection Safety Switch for Door Opening						
Material	Ceramic Fiber with Heating Wire-Internal, Powder Coated Steel-External Ceramic Fiber-Insulation						
Dimension (w x d x h)	Internal (cm)	13 x 25 x 9	15 x 30 x 10	20 x 30 x 20	25 x 35 x 16	30 x 30 x 30	40 x 40 x 40
	External (cm)	39 x 48 x 53	42 x 53 x 55	48 x 55 x 66	53 x 58 x 62	58 x 59 x 76	63 x 71 x 79
Packing Size (w x d x h) (cm)	62 x 53 x 74		68 x 58 x 76	67 x 62 x 90	72 x 68 x 84	74 x 74 x 105	116 x 90 x 110
Gross Weight	54 kg	62 kg	82 kg	88 kg	104 kg	225 kg	
Power plug type	Hybrid E+F		5 pole 16A CEE				
Power Supply*	AC 230V, 1N~, 50/60Hz		AC 400V, 3N~, 50 / 60Hz				

* Other Specifications are available upon Customer's Request.



Inner Chamber of Exposed Heating Elements-type



(1) Ceramic Fiber Plate (Included)



(2) Heat-resistant Gloves

Ordering Information

- DH.WFH22.03 Furnace, 230V, 3 Lit., "FH-03"
- DH.WFH22.05 , 4.5 Lit., "FH-05"
- DH.WFH23.12 Furnace, 400V, 3N~, 12 Lit., "FH-12"
- DH.WFH23.14 , 14 Lit., "FH-14"
- DH.WFH23.27 , 27 Lit., "FH-27"
- DH.WFH23.63 , 63 Lit., "FH-63"

Spare Ceramic Fiber Plates

- DH.WF211.03 (1) Ceramic Fiber Plate, "FS1103" for "F/FH-03" and "FP/FHP-03"
- DH.WF211.05 , "FS1105" for "F/FH-05" and "FP/FHP-05"
- DH.WF211.12 , "FS1112" for "F/FH-12" and "FP/FHP-12"
- DH.WF211.14 , "FS1114" for "F/FH-14" and "FP/FHP-14"
- DH.WF211.27 , "FS1127" for "F/FH-27" and "FP/FHP-27"
- DH.WF211.63 , "FS1163" for "F/FH-63" and "FP/FHP-63"

Optional Gloves & Power Cable

- NA.491041101 (2) Gloves, Heat-resistant, 900°C, Flexible & Long Sleeve, 1Pair

Validation (IQ, OQ) Service

- DH.WFH312.03 Validation Service(IQ, OQ), "FHV1203", for "FH-03"
- DH.WFH312.05 , "FHV1205", for "FH-05"
- DH.WFH312.12 , "FHV1212", for "FH-12"
- DH.WFH312.14 , "FHV1214", for "FH-14"
- DH.WFH312.27 , "FHV1227", for "FH-27"
- DH.WFH312.63 , "FHV1263", for "FH-63"

Cat. No	Description	Articles
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witeg® 1,200°C Programmable Digital Muffle Furnaces, “FHP”, Exposed Heating Elements-type with Digital PID Programmable Control, Short Heat-up Time, Ceramic Fiber, 4-Side Heating, with Ceramic Fiber Plate, 3~63 Lit.

■ with Certificate & Traceability :
Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System

■ Digital PID Programmable Controller : 3 Patterns with 16 Segments
■ CE Certified ■ PL(Product Liability) Insurance

- * User's Self-Compensation Function for Temperature (±50°C)
- * Programmable Timer : 99 hr 59 min
- * Resolution : 1°C, 1min
- * Included Ceramic Fiber Plate
- * Safety Switch for Door Opening
- * Ceramic Fiber embedded Heating Wire, 4-Side Heating

Specification

Capacity & Model and Temp. Range		3 Lit. "FHP-03"	4.5 Lit. "FHP-05"	12 Lit. "FHP-12"	14 Lit. "FHP-14"	27 Lit. "FHP-27"	63 Lit. "FHP-63"
300°C ~ 1200°C							
Heater		Kanthal A1, Embedded Wire Heating Elements, 4-Side Heating					
Thermocouple		K-type Thermocouple					
Heating Power		1.4 kW	1.8 kW	3.6 kW	4.0 kW	4.6 kW	9 kW
Required time to be reached 800°C		16 min		20 min		23 min	
Display		LED					
Controller		Programmable PID Controller : 3 Patterns 16 Segments					
Safety Circuit		Over-Temp./-Current protection, Sensor Error Detection Safety Switch for Door Opening					
Material		Ceramic Fiber with Heating Wire-Internal, Powder Coated Steel-External Ceramic Fiber-Insulation					
Dimension (w x d x h)	Internal (cm)	13 x 25 x 9	15 x 30 x 10	20 x 30 x 20	25 x 35 x 16	30 x 30 x 30	40 x 40 x 40
	External (cm)	39 x 48 x 53	42 x 53 x 55	48 x 55 x 66	53 x 58 x 62	58 x 59 x 76	63 x 71 x 79
Packing Size (w x d x h) (cm)		62 x 53 x 74	68 x 58 x 76	67 x 62 x 90	72 x 68 x 84	74 x 74 x 105	116 x 90 x 110
Gross Weight		54 kg	62 kg	82 kg	88 kg	104 kg	225 kg
Power plug type		Hybrid E+F		5 pole 16A CEE			
Power Supply*		AC 230V, 1N~, 50/60Hz		AC 400V, 3N~, 50 / 60Hz			

* Other Specifications are available upon Customer's Request.

Ordering Information

- DH.WFH12.P03 Furnace, 230V, 3 Lit., “FHP-03”
 DH.WFH12.P05 , 4.5 Lit., “FHP-05”
 DH.WFH13.P12 Furnace, 400V, 3N~, 12 Lit., “FHP-12”
 DH.WFH13.P14 , 14 Lit., “FHP-14”
 DH.WFH13.P27 , 27 Lit., “FHP-27”
 DH.WFH13.P63 , 63 Lit., “FHP-63”

Spare Ceramic Fiber Plates

- DH.WF211.03 (1) Ceramic Fiber Plate, “FS1103” for “F/FH-03” and “FP/FHP-03”
 DH.WF211.05 , “FS1105” for “F/FH-05” and “FP/FHP-05”
 DH.WF211.12 , “FS1112” for “F/FH-12” and “FP/FHP-12”
 DH.WF211.14 , “FS1114” for “F/FH-14” and “FP/FHP-14”
 DH.WF211.27 , “FS1127” for “F/FH-27” and “FP/FHP-27”
 DH.WF211.63 , “FS1163” for “F/FH-63” and “FP/FHP-63”

Optional Gloves & Power Cable

- NA.491041101 (2) Gloves, Heat-resistant, 900°C, Flexible & Long Sleeve, 1Pair

Validation (IQ, OQ) Service

- DH.WFH312.P03 Validation Service(IQ, OQ), “FHPV1203”, for “FHP-03”
 DH.WFH312.P05 , “FHPV1205”, for “FHP-05”
 DH.WFH312.P12 , “FHPV1212”, for “FHP-12”
 DH.WFH312.P14 , “FHPV1214”, for “FHP-14”
 DH.WFH312.P27 , “FHPV1227”, for “FHP-27”
 DH.WFH312.P63 , “FHPV1263”, for “FHP-63”



1200°C Digital Muffle Furnace, Embedded Heating Elements-type “FHP-14”



Inner Chamber of Exposed Heating Elements-type



(1) Ceramic Fiber Plate (Included)



(2) Heat-resistant Gloves