

Furnaces

- Digital PID Control System
- Max. Temperatures are 1,000 °C (FX-/FPX-model) or 1,200 °C (FHX-/FHPX-model)
- 4-Side Heating Mechanism ensure the Short Heat-up Time and High Temperature Uniformity
- User's 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. 65, 67
- **Programmable Digital Muffle Furnaces** P. 66, 68

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



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



Cat. No	Description	Articles
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DAIHAN-brand® 1,000 °C Digital Muffle Furnaces, "FX", Exposed Heating Elements-type, with Certi. & Traceability NEW with Digital PID 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
- Patented Jog-Dial Control System and Digital LCD with Back-Light Function
- CE Certified ■ PL(Product Liability) Insurance

* Designed for Ash-Determinations, Enameling, Fusions, Precipitate Drying
 * 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. "FX-03"	4.5 Lit. "FX-05"	12 Lit. "FX-12"	14 Lit. "FX-14"	27 Lit. "FX-27"	63 Lit. "FX-63"	
	300 °C ~ 1000 °C						
Heater	Kanthal A1, Expose 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-Dial 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 × d × h)	Internal (cm)	13×25×9	15×30×10	20×30×20	25×35×16	30×30×30	40×40×40
	External (cm)	39×48×53	42×53×55	48×55×66	53×58×62	58×59×76	63×71×79
Packing Size(w×d×h) (cm)	63×54×77		68×57×78		70×63×89		74×68×85
Gross Weight	47 kg	54 kg	59 kg	73 kg	83 kg	225 kg	
Power Supply*	1 Phase, AC 120V, 60Hz or AC 230V, 50/60Hz		1 Phase AC 120V, 60Hz or AC 230V, 50/60Hz or 3 Phase AC 380V, 50/60Hz				

* Other Specifications are available upon Customer's Request.

Ordering Information

- DH.WF21.03 Furnace, 1Phase, 230V, 3 Lit., "FX-03"
- DH.WF21.05 , 4.5 Lit., "FX-05"
- DH.WF21.12 , 12 Lit., "FX-12"
- DH.WF21.14 , 14 Lit., "FX-14"
- DH.WF21.27 , 27 Lit., "FX-27"
- DH.WF21.63 , 63 Lit., "FX-63"
- DH.WF20.03 Furnace, 1Phase, 120V, 3 Lit., "FX-03"
- DH.WF20.05 , 4.5 Lit., "FX-05"
- DH.WF20.12 , 12 Lit., "FX-12"
- DH.WF20.14 , 14 Lit., "FX-14"
- DH.WF20.27 , 27 Lit., "FX-27"
- DH.WF23.12 Furnace, 3Phase, 380V, 12 Lit., "FX-12"
- DH.WF23.14 , 14 Lit., "FX-14"
- DH.WF23.27 , 27 Lit., "FX-27"
- DH.WF23.63 , 63 Lit., "FX-63"

Spare Ceramic Fiber Plates

- DH.WF211.03 (1) Ceramic Fiber Plate, "FS1103" for 3Lit.
- DH.WF211.05 , "FS1105" for 4.5Lit.
- DH.WF211.12 , "FS1112" for 12Lit.
- DH.WF211.14 , "FS1114" for 14Lit.
- DH.WF211.27 , "FS1127" for 27Lit.
- DH.WF211.63 , "FS1163" for 63Lit.

Optional Gloves & Power Cable

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

Validation (IQ, OQ) Service

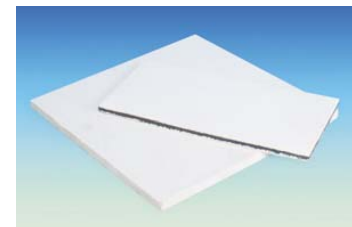
- DH.WF311.03 Validation Service(IQ, OQ), "FV1103", for "FX-03"
- DH.WF311.05 , "FV1105", for "FX-05"
- DH.WF311.12 , "FV1112", for "FX-12"
- DH.WF311.14 , "FV1114", for "FX-14"
- DH.WF311.27 , "FV1127", for "FX-27"
- DH.WF311.63 , "FV1163", for "FX-63"



1000°C Digital Muffle Furnace, Exposed Heating Elements-type "FX-14"



Inner Chamber of Exposed Heating Elements-type



(1) Ceramic Fiber Plate (Included)



(2) Heat-resistant Gloves

DAIHAN-brand® 1,000 °C Programmable Digital Muffle Furnaces, "FPX", Exposed Heating Elements-type **NEW** with Digital PID Programmable Control, Short Heat-up Time, Ceramic Fiber, 4-Side Heating, with Ceramic Fiber Plate, 3~63 Lit.



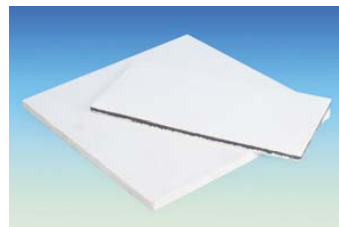
Digital PID Controller : 3 Patterns with 16 Segments



1000 °C Digital Muffle Furnace, Exposed Heating Elements-type "FPX-14"



Inner Chamber of Exposed Heating Elements-type



(1) Ceramic Fiber Plate (Included)



(2) Heat-resistant Gloves

- 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
- * Ceramic Fiber Exposed Heating Wire, 4-Side Heating
- * Safety Switch for Door Opening
- * Resolution : 1 °C, 1min

Specification

Capacity & Model and Temp. Range	3 Lit.	4.5 Lit.	12 Lit.	14 Lit.	27 Lit.	63 Lit.	
	"FPX-03"	"FPX-05"	"FPX-12"	"FPX-14"	"FPX-27"	"FPX-63"	
300 °C ~ 1000 °C							
Heater	Kanthal A1, Exposed 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 × d × h)	Internal (cm)	13 × 25 × 9	15 × 30 × 10	20 × 30 × 20	25 × 35 × 16	30 × 30 × 30	40 × 40 × 40
	External (cm)	39 × 48 × 53	42 × 53 × 55	48 × 55 × 66	53 × 58 × 62	58 × 59 × 76	63 × 71 × 79
Packing Size(w × d × h) (cm)	63 × 54 × 77	68 × 57 × 78	70 × 63 × 89	74 × 68 × 85	74 × 73 × 99	116 × 90 × 110	
Gross Weight	47 kg	54 kg	59 kg	73 kg	83 kg	225 kg	
Power Supply*	1 Phase, AC 120V, 60Hz or AC 230V, 50/60Hz		1 Phase AC 120V, 60Hz or AC 230V, 50/60Hz or 3 Phase AC 380V, 50/60Hz				

* Other Specifications are available upon Customer's Request.

Ordering Information

- DH.WF21.P03 Furnace, 1Phase, 230V, 3 Lit., "FPX-03"
- DH.WF21.P05 , 4.5 Lit., "FPX-05"
- DH.WF21.P12 , 12 Lit., "FPX-12"
- DH.WF21.P14 , 14 Lit., "FPX-14"
- DH.WF21.P27 , 27 Lit., "FPX-27"
- DH.WF21.P63 , 63 Lit., "FPX-63"
- DH.WF20.P03 Furnace, 1Phase, 120V, 3 Lit., "FPX-03"
- DH.WF20.P05 , 4.5 Lit., "FPX-05"
- DH.WF20.P12 , 12 Lit., "FPX-12"
- DH.WF20.P14 , 14 Lit., "FPX-14"
- DH.WF20.P27 , 27 Lit., "FPX-27"
- DH.WF23.P12 Furnace, 3Phase, 380V, 12 Lit., "FPX-12"
- DH.WF23.P14 , 14 Lit., "FPX-14"
- DH.WF23.P27 , 27 Lit., "FPX-27"
- DH.WF23.P63 , 63 Lit., "FPX-63"

Spare Ceramic Fiber Plates

- DH.WF211.03 (1) Ceramic Fiber Plate, "FS1103" for 3Lit.
- DH.WF211.05 , "FS1105" for 4.5Lit.
- DH.WF211.12 , "FS1112" for 12Lit.
- DH.WF211.14 , "FS1114" for 14Lit.
- DH.WF211.27 , "FS1127" for 27Lit.
- DH.WF211.63 , "FS1163" for 63Lit.

Optional Gloves & Power Cable

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

Validation (IQ, OQ) Service

- DH.WF311.P03 Validation Service(IQ, OQ), "FPV1103", for "FPX-03"
- DH.WF311.P05 , "FPV1105", for "FPX-05"
- DH.WF311.P12 , "FPV1112", for "FPX-12"
- DH.WF311.P14 , "FPV1114", for "FPX-14"
- DH.WF311.P27 , "FPV1127", for "FPX-27"
- DH.WF311.P63 , "FPV1163", for "FPX-63"

Fu Furnaces, 1200 °C, DAIHAN-brand®

Articles

Cat. No

Description

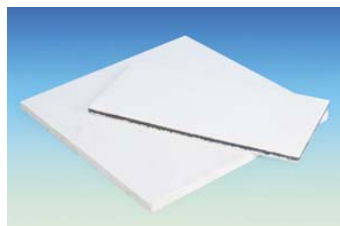
DAIHAN-brand® 1,200 °C Programmable Digital Muffle Furnaces, "FHPX", Exposed Heating Elements-type **NEW** with Digital PID Programmable Control, Short Heat-up Time, Ceramic Fiber, 4-Side Heating, with Ceramic Fiber Plate, 3~63 Lit.



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



Inner Chamber of Exposed Heating Elements-type



(1) Ceramic Fiber Plate (Included)



(2) Heat-resistant Gloves

- 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 * Ceramic Fiber Exposed Heating Wire, 4-Side Heating
- * Resolution : 1 °C, 1min * Safety Switch for Door Opening * Included Ceramic Fiber Plate

Specification

Capacity & Model and Temp. Range	3 Lit.	4.5 Lit.	12 Lit.	14 Lit.	27 Lit.	63 Lit.	
	"FHPX-03"	"FHPX05"	"FHPX-12"	"FHPX-14"	"FHPX-27"	"FHPX-63"	
300 °C ~ 1200 °C							
Heater	Kanthal A1, Exposed 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 × d × h)	Internal (cm)	13×25×9	15×30×10	20×30×20	25×35×16	30×30×30	40×40×40
	External (cm)	39×48×53	42×53×55	48×55×66	53×58×62	58×59×76	63×71×79
Packing Size (w × d × h) (cm)	63×54×77	68×57×78	70×63×89	74×68×85	74×73×99	116×90×110	
Gross Weight	47 kg	54 kg	59 kg	73 kg	83 kg	225 kg	
Power Supply*	1 Phase, AC 120V, 60Hz or AC 230V, 50/60Hz		1 Phase AC 120V, 60Hz or AC 230V, 50/60Hz or 3 Phase AC 380V, 50/60Hz				

* Other Specifications are available upon Customer's Request.

Ordering Information

- DH.WFH22.P03 Furnace, 1Phase, 230V, 3 Lit., "FHPX-03"
 DH.WFH22.P05 , 4.5 Lit., "FHPX-05"
 DH.WFH22.P12 , 12 Lit., "FHPX-12"
 DH.WFH22.P14 , 14 Lit., "FHPX-14"
 DH.WFH22.P27 , 27 Lit., "FHPX-27"
 DH.WFH22.P63 , 63 Lit., "FHPX-63"
 DH.WFH20.P03 Furnace, 1Phase, 120V, 3 Lit., "FHPX-03"
 DH.WFH20.P05 , 4.5 Lit., "FHPX-05"
 DH.WFH20.P12 , 12 Lit., "FHPX-12"
 DH.WFH20.P14 , 14 Lit., "FHPX-14"
 DH.WFH20.P27 , 27 Lit., "FHPX-27"
 DH.WFH23.P12 Furnace, 3Phase, 380V, 12 Lit., "FHPX-12"
 DH.WFH23.P14 , 14 Lit., "FHPX-14"
 DH.WFH23.P27 , 27 Lit., "FHPX-27"
 DH.WFH23.P63 , 63 Lit., "FHPX-63"

Spare Ceramic Fiber Plates

- DH.WF211.03 (1) Ceramic Fiber Plate, "FS1103" for 3Lit.
 DH.WF211.05 , "FS1105" for 4.5Lit.
 DH.WF211.12 , "FS1112" for 12Lit.
 DH.WF211.14 , "FS1114" for 14Lit.
 DH.WF211.27 , "FS1127" for 27Lit.
 DH.WF211.63 , "FS1163" for 63Lit.

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 "FHPX-03"
 DH.WFH312.P05 , "FHPV1205", for "FHPX-05"
 DH.WFH312.P12 , "FHPV1212", for "FHPX-12"
 DH.WFH312.P14 , "FHPV1214", for "FHPX-14"
 DH.WFH312.P27 , "FHPV1227", for "FHPX-27"
 DH.WFH312.P63 , "FHPV1263", for "FHPX-63"