Accessories

HAKO FM-2027 SR

Soldering Iron









HAKOFM-2026 疑

70 W N₂ Soldering Iron









HAKOFM-2029 歸

Hot-Air Pencil

Nozzle not included







HAKO FM-2030 疑

Heavy Duty Soldering Iron

Tip not included







HAKOFM-2031 歸

140 W N₂ Soldering Iron

Tip not included









HAKOFM-2032 SEP



Micro Soldering Iron

Tip not included









PARALLEL REMOVER FM-2022 SAFE

SMD Hot Tweezers

Tip not included









HAKO MODEL FSD FM-2023 SAFE

Mini SMD Hot Tweezers

Tip included







PLAKO MODEL FSD SAFE

Desoldering Tool

Nozzle not included









High Performance Rework Station & Accessories

Specifications

Model No.	FM-203
Power consumption	140 W
Temperature range	FM-2026/2027: 200 to 450°C FM-2022/2023: 200 to 400°C FM-2032: 200 to 450°C FM-2024: 350 to 450°C
Temperature stability	±5°C at idle temperature

Station

Output voltage	AC 24 V
Dimensions	120 (W) × 120 (H) × 190 (D) mm
Weight	2.7 kg

Soldering Iron (FM-2027)

Power consumption	70 W (24 V)
Tip to ground resistance	<2 Ω
Tip to ground potential	<2 mV
Heating element	Composite heater
Cord length	1.2 m
Total length*	188 mm (with 2.4D tip)
Weight*	30 g (with 2.4D tip)

^{*} Without cord

Model No.	FM-206
Power consumption	410 W (max.)
Temperature range	FM-2026/2027: 200 to 450°C FM-2022/2023: 200 to 400°C FM-2024: 350 to 450°C FM-2029: 100 to 550°C FM-2030: 200 to 500°C FM-2031: 200 to 500°C FM-2032: 200 to 450°C
Temperature stability	±5°C at idle temperature

Station

Output voltage	AC 24 V
Vacuum generator	Cylinder type vacuum pump
Vacuum pressure	80 kPa (600 mmHg, max.)
Suction flow	14 L/min.
Air flow	6 L/min. (max.)
Dimensions	162 (W) × 136 (H) × 245 (D) mm
Weight*	6.2 kg

Soldering Iron (FM-2027)

Power consumption	70 W (24 V)
Tip to ground resistance	<2 Ω
Tip to ground potential	<2 mV
Heating element	Composite heater
Cord length	1.2 m
Total length*	188 mm (with 2.4D tip)
Weight*	30 g (with 2.4D tip)

Desoldering Tool (FM-2024)

Power consumption	70 W (24 V)
Nozzle to ground resistance	<2 Ω
Nozzle to ground potential	<2 mV
Heating element	Composite heater
Cord length	1.2 m
Total length*	180 mm (with ø1.0 mm nozzle)
Weight**	65 a (with ø1.0 mm nozzle)

Hot Air Handpiece (FM-2029)

Power consumption	140 W (24 V)
Nozzle to ground resistance	<2 Ω
Nozzle to ground potential	<2 mV
Heating element	Composite heater
Cord length	1.2 m
Total length**	232 mm (with ø4.0 mm nozzle)
Weight***	50 g (with ø4.0 mm nozzle)

Model No.	FM-2022
Power consumption	140 W (24 V)
Tip to ground resistance	<2 Ω
Tip to ground potential	<2 mV
Heating element	Composite heater
Cord length	1.2 m
Total length*	148 mm (with SOP 25L tip)
Weight*	64 g (with SOP 25L tip)

^{*} Without cord

Model No.	FM-2023
Power consumption	140 W (24 V)
Γip to ground resistance	<2 Ω
Γip to ground potential	<2 mV
Heating element	Composite heater
tandard tip	Shape-I: 2 pcs/set (No.T9-I)
ord length	1.2 m
otal length*	117 mm (with I tip)
Veight*	37 g (with I tip)

Model No.

Desoldering Tool	
Power consumption	70 W (24 V)
Nozzle to ground resistance	<2 Ω
Nozzle to ground potential	<2 mV
Heating element	Composite heater
Cord length	1.2 m
Total length*	180 mm (with ø1.0 mm nozzle)
Weight*	65 g (with ø1.0 mm nozzle)

• Desolder Control Box

Power consumption	12 W (24 V)
Output voltage	24 V
Vacuum generator	Ejector type
Vacuum pressure	Max. 93 kPa (700 mmHg)
Suction flow	28 L/min.
Nozzle to ground potential	<2 mV
Applied air pressure	490 kPa (5.0 kgf/cm²) While trigger or button is pressed
Compressed air consumption	46 L/min.
Outer dimensions	119 (W) x 45 (H) x 172 (D) mm
Weight*	1.2 kg
1000.000100	

^{*} Without cord

Model No.	FM-2026		
Power consumption	70 W (24 V)		
Tip to ground resistance	<2 Ω		
Tip to ground potential	<2 mV		
Heating element	Composite heater		
Cord length	1.2 m		
Total length*	205 mm (with 2.4D tip)		
Weight*	45 g (with 2.4D tip and nozzle assembly C)		

^{*} Without cord and tube

Model No.	FM-2027
Power consumption	70 W (24 V)
Tip to ground resistance	<2 Ω
Tip to ground potential	<2 mV
Heating element	Composite heater
Cord length	1.2 m
Total length*	188 mm (with 2.4D tip)
Weight*	30 g (with 2.4D tip)

^{*} Without cord

Specifications

Model No.	FM-2030		
Power consumption	140 W (24 V)		
Tip to ground resistance	<2 Ω		
Tip to ground potential	<2 mV		
Heating element	Composite heater		
Cord length	1.3 m		
Total length*	224 mm (with 2.4D tip)		
Weight*	41 g (with 2.4D tip)		

^{*} Without cord

Model No.	FM-2032
Power consumption	48 W (24 V)
Tip to ground resistance	<2 Ω
Tip to ground potential	<2 mV
Heating element	Composite heater
Cord length	1.3 m
Total length*	170 mm (with 1D tip)
Weight*	14 g (with 1D tip)

^{*} Without cord

Model No.	FM-2031		
Power consumption	140 W (24 V)		
Tip to ground resistance	<2 Ω		
Tip to ground potential	<2 mV		
Heating element	Composite heater		
Cord length	1.2 m		
Total length*	231 mm (with 2.4D tip)		
Weight*	47 g (with 2.4D tip and nozzle assembly E)		

^{*} Without cord and tube

Packing List

FM-203	Station, Handpiece (FM-2027), Sleeve assembly, Connecting cable, Power cord, Control card, Iron holder, Tip tray, Heat resistant pad, Instruction manual		
FM-206	Station, Power cord, Tip tray, Desoldering tool (FM-2024), Handle (for gun configuration for FM-2024), Iron holder (for FM-2024), Ceramic paper filter (10 pcs; for FM-2024), Nozzle remover (for FM-2024), Cleaning drill for heating element (for FM-2024), Connecting cable (for FM-2024), Handpiece (FM-2027), Iron holder (for FM-2027), Heat resistant pad (for FM-2027), Connecting cable (for FM-2027), Hot air handpiece (FM-2029), Iron holder (for FM-2029), Iron holder (for FM-2029), Connecting cable (for FM-2029), Instruction manual		
FM-2022 (Conversion kit)	Parallel remover, Heat resistant pad, Iron holder, Connecting cable, Instruction manual		
FM-2023 (Conversion kit)	Mini parallel remover, Soldering tip (T9-I), Heat resistant pad, Iron holder, Component bed, Connecting cable, Instruction manual		

FM-2024 Features

Please see the features on P.55.

FM-2029 Features

Securely and easily remove 10 x 10 (mm) chips.



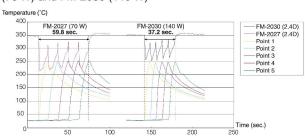
FM-2032 Size



FM-2024 (Conversion kit, with DCB)	Desoldering tool, Handle (for gun configuration), Desoldering control box, Filter pipe assembly, Iron holder, Cleaning drill for heating element, Nozzle remover, Ceramic paper filter (10 pcs), Connecting cable, Instruction manual		
FM-2026 (Conversion kit)	Handpiece, Sleeve cover, Sleeve assembly (yellow), Heat resistant pad, Iron holder, Connecting cable, Instruction manual		
FM-2027 (Conversion kit)	Handpiece, Sleeve assembly (yellow), Heat resistant pad, Iron holder, Connecting cable		
FM-2029 (Conversion kit)	Handpiece (hot air), Handpiece holder, Heat resistant pad, Connecting cable, Instruction manual		
FM-2030 (Conversion kit)	Handpiece (soldering), Heat resistant pad, Iron holder, Connecting cable, Instruction manual		
FM-2031 (Conversion kit)	Handpiece (soldering), Heat resistance pad, Iron holder, Connecting cable, Instruction manual		
FM-2032 (Conversion kit)	Handpiece, Heat resistant pad, Iron holder, Connecting cable, Instruction manual		

FM-2030 Features

Graph of a comparison of the performance of FM-2027 (70 W) and FM-2030 (140 W) $\,$



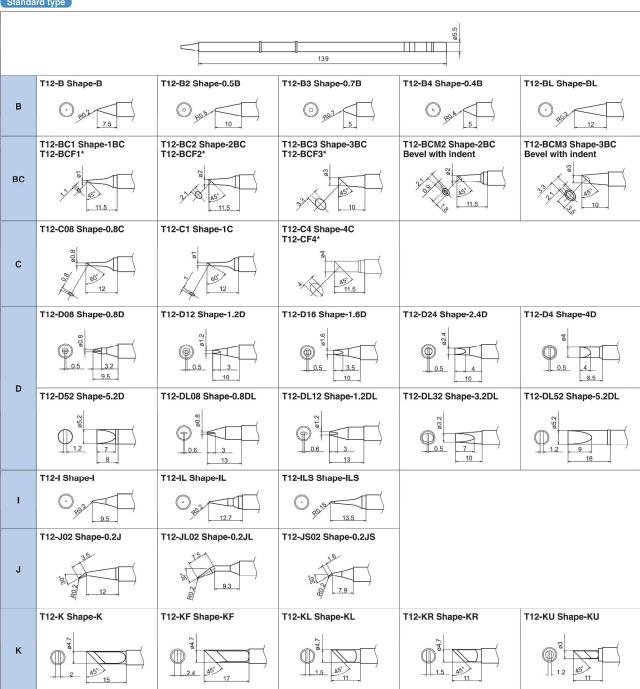
Test criteria

Test method	Solder at 5 points and measure the time until the temperature of the workpiece reaches 250°C.		
Board	Bakelite board		
Component used	Screw		
Tip shape	Shape-2.4D		
Temperature setting	350°C		
Solder	Lead-free solder (Sn/Ag/Cu), diameter: 1.0 mm		

High Performance Soldering Accessories

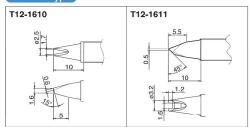
Optional Tips for the FM-2027





^{*} These tips are tinned on the soldering surface only.

Concave type



SMD type

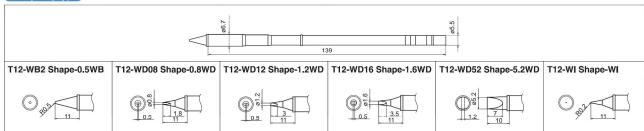
	T12-1201 Quad 13.6 x 8.5	T12-1202 Quad 10.3 x 10.3	T12-1203 Quad 12.8 x 12.8	T12-1204 Quad 17.9 x 17.9	T12-1205 Quad 23.4 x 17.3
Overd	13.6 14.8 5.5	10.3	12.8 14	17.9 19	23.4 24.6
Quad	T12-1206 Quad 22.5 x 16.5	T12-1207 Quad 15.5 x 15.5	T12-1208 Quad 15.8 x 15.8	T12-1209 Quad 8.4 x 8.4	
	22.5 23.7 7.3	15.5 16.7	15.8 17	8.4 9.6 5.5	
	T12-1001 Tunnel 5.1 x 4.6	T12-1002 Tunnel 5.1 x 10.4	T12-1003 Tunnel 9.5 x 18.3	T12-1004 Tunnel 9.5 x 15.8	T12-1005 Tunnel 9.5 x 13.2
	4.6 \(\frac{1}{16} \) \(10.4 6 2.3 4.5	7. w w w w w w w w w w w w w w w w w w w	15.8	13.2 5.5
Tunnel	T12-1006 Tunnel 6.9 x 11.4	T12-1007 Tunnel 7.9 x 18.8	T12-1008 Tunnel 19.5 x 10.2	T12-1009 Tunnel 13.4 x 20.5	T12-1010 Tunnel 19.5 x 12
	11.4 2.3 4.5	18.8	6:31	20.5 4.3 6	6 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
	T12-1401 Spatula 10.4	T12-1402 Spatula 15.7	T12-1403 Spatula 21.2	T12-1404 Spatula 25	T12-1405 Spatula 32
	10.4	15.7	21.2 7.2 9.5	25 7.2 9.5	32 7.2 9.5
Spatula	T12-1406 Spatula 40				
	40				

Long life type

T12-B2Z Shape-0.5B (Z)	T12-BC1Z Shape-1BC (Z) T12-BCF1Z*	T12-BC2Z Shape-2BC (Z) T12-BCF2Z*	T12-BC3Z Shape-3BC (Z) T12-BCF3Z*	T12-BZ Shape-B (Z)
0 295 10	22 45 10	13 10	32 10	0,002
T12-C4Z Shape-4C (Z) T12-CF4Z*	T12-D12Z Shape-1.2D (Z)	T12-D16Z Shape-1.6D (Z)	T12-D24Z Shape-2.4D (Z)	T12-D4Z Shape-4D (Z)
5 10 10 no	0.5	0.5 10	0.5 10	0.5 4
T12-KFZ Shape-KF (Z)	T12-KRZ Shape-KR (Z)			
2.4 45 17	2 45			

 $[\]ensuremath{^{\star}}$ These tips are tinned on the soldering surface only.

Heavy duty type



High Performance Rework Station & Accessories

Optional Tips for the FM-2032 T30-D06 Shape-0.6D T30-KU Shape-KU T30-KN Shape-KN T30-D1 Shape-1D T30-I Shape-I T30-J Shape-J Optional Tips for the FM-2022 Unit: mm CHIP *1 set: 2 pcs T8-1001 Chip 0.5I T8-1002 Chip 0.5C T8-1003 Chip 1L T8-1004 Chip 2L T8-1013 Chip 3L T8-1006 SOP 8L T8-1005 SOP 6L T8-1007 SOP 10L T8-1008 SOP 13L T8-1009 SOP 16L T8-1010 SOP 20L T8-1011 SOP 25L T8-1012 SOP 18L Replacement Tips for the FM-2023 Unit: mm CHIP *1 set: 2 pcs T9-I Chip I T9-L1 Chip 1L T9-L2 Chip 2L Optional Tips for the FM-2030 Unit: mm T22-BL Shape-BL T22-BL2 Shape-2BL T22-BC2 Shape-2BC T22-C3 Shape-3C T22-C5 Shape-5C T22-C6 Shape-6C T22-D24 Shape-2.4D T22-D08 Shape-0.8D T22-D12 Shape-1.2D T22-D16 Shape-1.6D T22-D32 Shape-3.2D T22-D45 Shape-4.5D

T22-K Shape-K

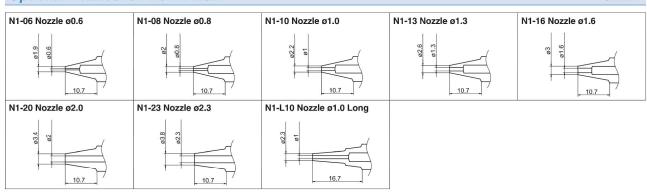
T22-JD08 Shape-0.8JD

T22-D52 Shape-5.2D

T22-J02 Shape-0.2J

Optional Nozzles for the FM-2024

Unit: mm



Optional Nozzles for the FM-2029

Unit: mm

	B A A	
	 øA	øB
N4-01 Nozzle ø2.0	2.0	2.5
N4-02 Nozzle ø4.0	4.0	5.0
N4-03 Nozzle ø6.0	6.0	7.0
N4-04 Nozzle ø8.0	8.0	9.0

Optional Tips for the FM-2026

Please see the optional tips on P.32.

Optional Tips for the FM-2031

Please see the optional tips on P.32.