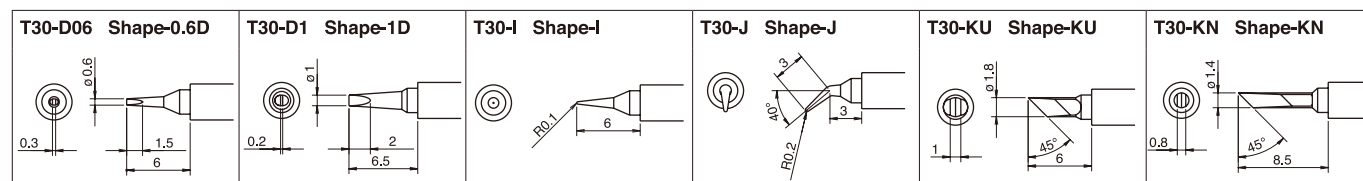
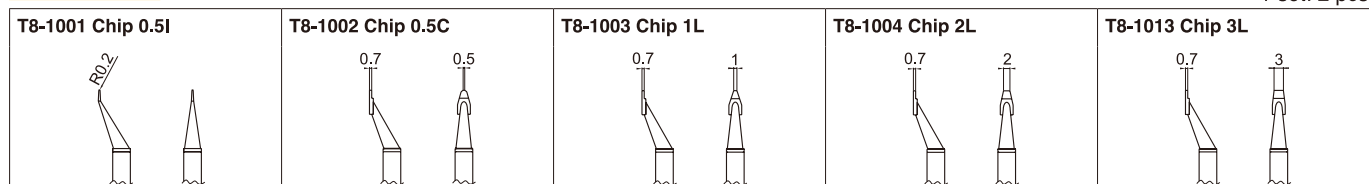


**T30 series** For Model FM-2032



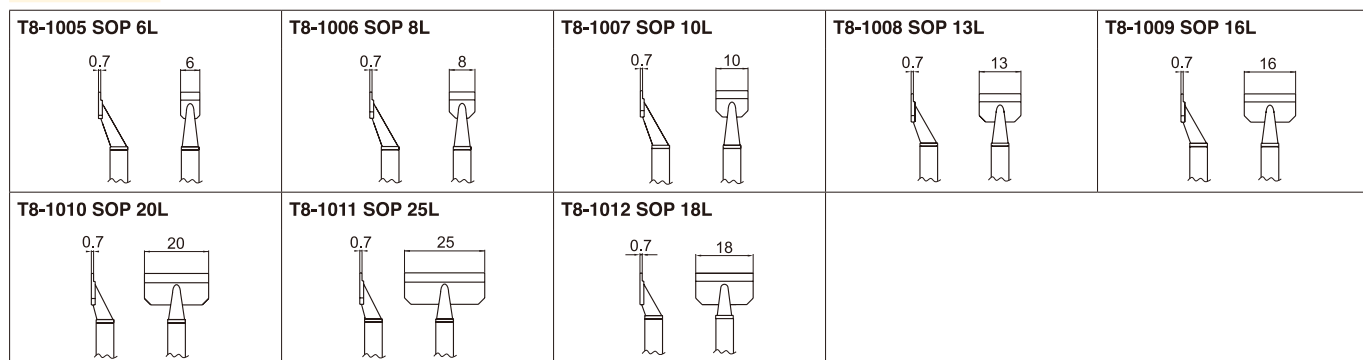
**T8 series** For Model FM-2022

## CHIP



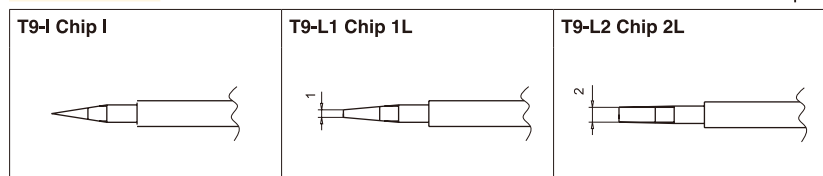
\*1 set: 2 pcs

**SOP**



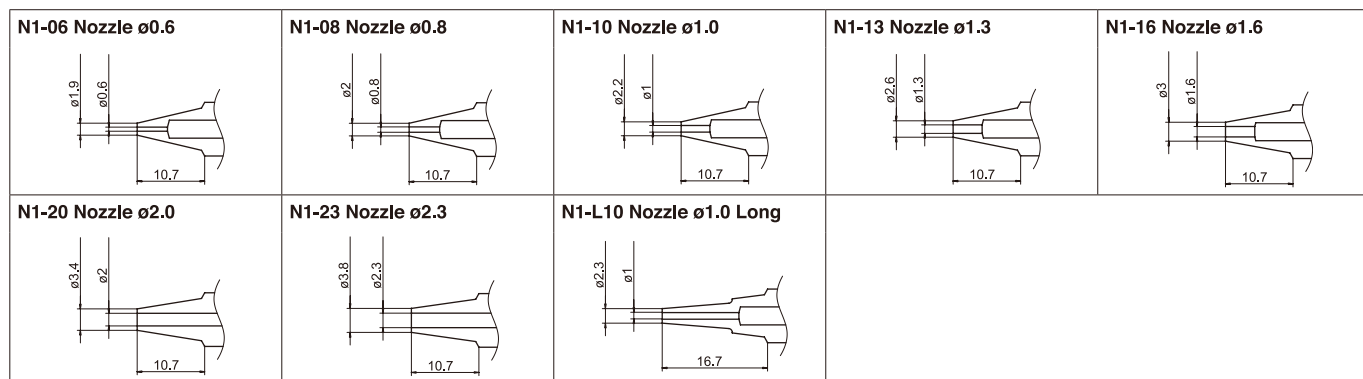
**T9 series** For Model FM-2023

## CHIP



\*1 set: 2 pcs

**N1 series** For Model FM-2024



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- Soldering Iron FM-2027



- Micro Soldering Iron FM-2032

Highly-advanced multifunctional station.  
Equipped with 2 connection ports to enable a single station to simultaneously play 2 roles.



- Parallel Remover Model FM-2022



- Mini Parallel Remover Model FM-2023



- Desoldering Tool Model FM-2024



- HAKKO FM-203: Station + Soldering Iron

A single station plays multiple roles: Soldering, desoldering and SMD rework. This station with 2 connection ports allows users to use it more comfortably.



**HAKKO FM-203** ESD SAFE  
SOLDERING STATION

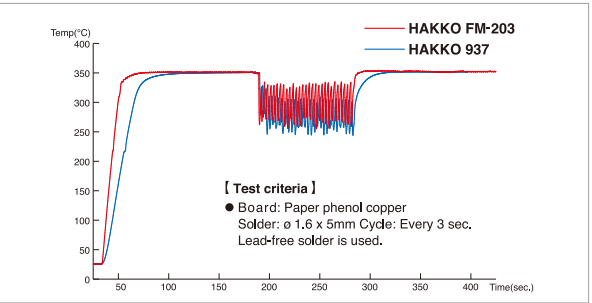
■ Two connection ports

Two soldering irons can be connected at the same time, which allows users to select and use the appropriate one without having to connect them alternatively.

■ Powerful thermal recovery

The composite tip provides powerful thermal recovery and stable temperature accuracy.

● Thermal Recovery Graph

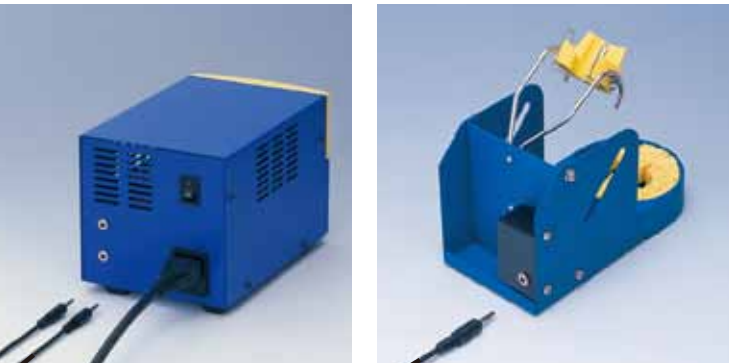


■ Sleep function

After the iron is inserted into the iron holder, the sleep function activates for a user-settable time (0 to 29 min.) and the tip temperature will decrease to approximately 200°C.

■ Auto power shut-off function

When 30 minutes have elapsed after inserting the iron into the iron holder, the auto power shut-off function activates and stops to supply power to the heating element.



connecting cable  
Connect the FM-203 station and FH-200 iron holder using a connecting cable.

\*It is necessary to change unit settings before using sleep and auto power shut-off functions.

Soldering

**HAKKO FM-2027** ESD SAFE

Soldering Iron

- Lightweight grip provides fatigueless work even for extended jobs.



**HAKKO FM-2032** ESD SAFE

Micro Soldering Iron

- Ideal for micro-soldering applications under a microscope



N<sub>2</sub> system



● Example setup

FM-2026 N<sub>2</sub> soldering iron  
FX-780 N<sub>2</sub> generator  
FX-791 N<sub>2</sub> station (N<sub>2</sub> airflow meter)

\*For further details, refer to HAKKO web site.

Desoldering

**HAKKO MODEL FM-2024** ESD SAFE

Desoldering Tool



● Easy maintenance

Uses disposable paper filter pipes. Allows paper and solder to be disposed of separately. Quick nozzle replacement. Nozzle can be replaced safely with the provided nozzle remover.

Safe design

Equipped with a nozzle lock function. Inserting a nozzle into the grip automatically locks it in place and prevents the nozzle cartridge from being pulled out suddenly.

Selectable grip

Detachable handle allows two-way use: gun type or straight type.



DCB (Desoldering Control Box)

\*Before using the FM-2024 unit, connect it to the desoldering control box and compressor.

● Example setup



Combination examples of handpieces which can be connected.

Since all handpieces cannot be connected to each connector port, refer to the following table.



Handpiece	Channel D connector	Channel S connector
FM-2027	○	○
FM-2022 *1	○	×
FM-2023 *1	○	×
FM-2024 *2	○	○
FM-2026 *3	○	○
FM-2032	○	○

\*1 If the FM-2022 or the FM-2023 handpiece is connected to the channel D connector the other handpiece connected to the channel S connector can be used with it at the same time. If either handpiece is used, the non-used handpiece will be automatically subject to sleep mode.

\*2 If two FM-2024 handpieces are connected to both channel connectors connect each of them to the desolder control box.

\*3 The N<sub>2</sub> generator and N<sub>2</sub> airflow meter must be connected before using the FM-2026.  
For further details, refer to the N<sub>2</sub> system brochure.



List of Specifications and Example Setups



**HAKKO FM-203** ESD SAFE  
SOLDERING STATION  
\*Tip is an optional part.

● <b>HAKKO FM-203</b>	
Power Consumption	140W
Temperature Range	200 to 450°C
Temperature Accuracy	±5°C at idle temperature
● <b>Station</b>	
Output	24V
Dimensions	120(W) x 120(H) x 190(D)mm
Weight	2.7kg
● <b>HAKKO FM-2027 Soldering Iron</b>	
Power Consumption	70W (24V)
Tip to Ground Resistance	< 2
Tip to Ground Potential	< 2mV
Total Length (w/o cord)	188mm with 2.4D tip
Weight (w/o cord)	30g with 2.4D tip
Cord	1.2m

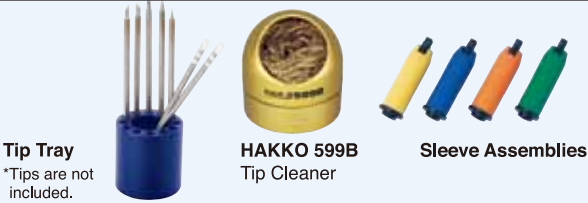
\*The temperature was measured using the HAKKO FG-101 thermometer.



**Packing List**  
Station, Handpiece (FM-2027), Sleeve assembly, Connecting cable, Power cord, Control card, Iron holder, Tip tray, Heat resistant pad, Instruction manual

■ Replacement and Optional Parts

Part No.	Name/Description	Applicable
B3216	Sleeve assembly, yellow	FM-2027
B3218	Sleeve assembly, blue	FM-2027
B3217	Sleeve assembly, orange	FM-2027
B3219	Sleeve assembly, green	FM-2027
599B-02	Tip cleaner	FH-200
B3253	Connecting cable	FM-203, FH-200
A1514	Ceramic paper filter / 10pcs	FM-2024
A1512	Front holder	FM-2024
A1511	Filter pipe assembly	FM-2024
B2756	Tip tray	FM-2027



Soldering

\*For N2 system details, refer to HAKKO web site.

**HAKKO FM-2027** ESD SAFE **HAKKO FM-2032** ESD SAFE  
Soldering Iron Micro Soldering Iron  
\*Tip is an optional part.



● <b>Specifications</b>	
Power Consumption	70 W (24 V)
Tip to Ground Resistance	<2Ω
Tip to Ground Potential	<2mV
Total Length (w/o cord)	188 mm with 2.4D tip
Weight (w/o cord)	30 g with 2.4D tip
Cord	1.2 m



● <b>Specifications</b>	
Power Consumption	48 W (24 V)
Tip to Ground Resistance	<2Ω
Tip to Ground Potential	<2mV
Total Length (w/o cord)	170 mm with 1D tip
Weight (w/o cord)	14 g with 1D tip
Cord	1.3 m

No.FM2027-03 Conversion kit



No.FM2032-52 Conversion kit



SMD rework

**HAKKO MODEL FM-2022** ESD SAFE  
Parallel Remover  
\*Tip is an optional part.



● <b>Specifications</b>	
Power Consumption	140 W (24 V)
Temperature Range	200 to 400°C
Tip to Ground Resistance	<2Ω
Tip to Ground Potential	<2mV
Total Length (w/o cord)	148 mm with SOP 25L tip
Weight (w/o cord)	64 g with SOP 25L tip
Cord	1.2 m

No.FM2022-05 Conversion kit



**HAKKO MODEL FM-2023** ESD SAFE  
Mini Parallel Remover  
\*Tips(shape-I) are originally attached.



● <b>Specifications</b>	
Power Consumption	140 W (24 V)
Temperature Range	200 to 400°C
Tip to Ground Resistance	<2Ω
Tip to Ground Potential	<2mV
Total Length (w/o cord)	117 mm with I tip
Weight (w/o cord)	37 g with I tip
Cord	1.2 m
Standard Tip	T9-I (Shape-I)

No.FM2023-06 Conversion kit



Desoldering

**HAKKO MODEL FM-2024** ESD SAFE  
Desoldering Tool  
\*Nozzle is an optional part.

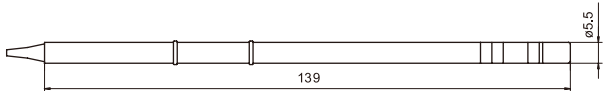

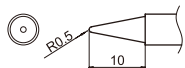


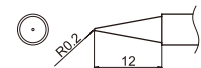
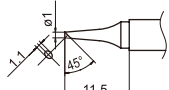
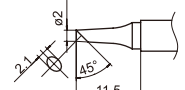
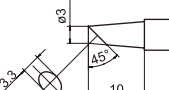
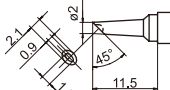
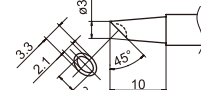
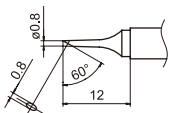
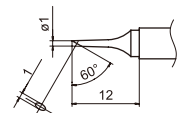
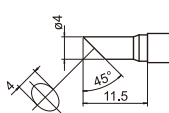
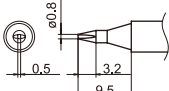
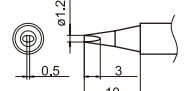
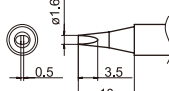

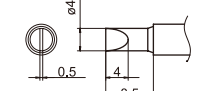
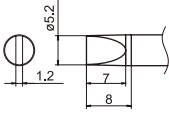
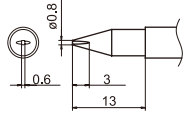
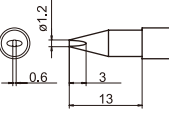
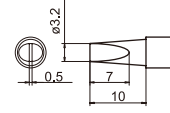
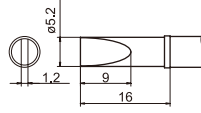
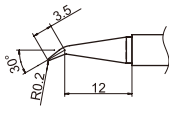
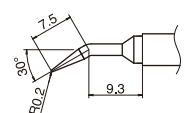
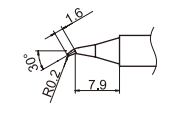
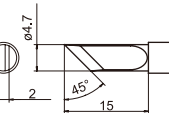
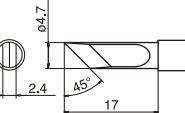
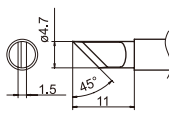
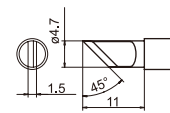
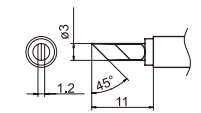


● <b>MODEL FM-2024 Desoldering Tool</b>	
Power Consumption	70 W (24 V)
Temperature Range	350 to 450°C
Tip to Ground Resistance	<2mV
Tip to Ground Potential	<2Ω
Total Length (w/o cord)	180 mm with ø1.0 nozzle
Weight (w/o cord)	65 g with ø1.0 nozzle
Cord	1.2 m

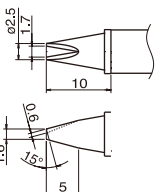
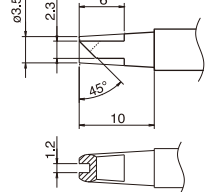
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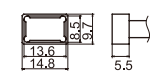
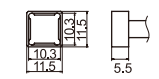


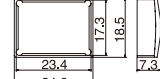
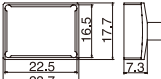
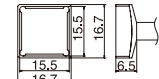

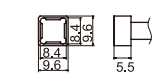
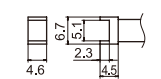
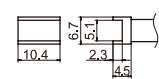
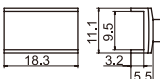
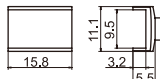
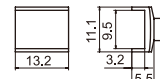
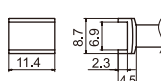
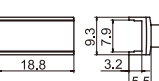
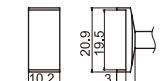
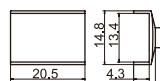
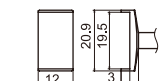
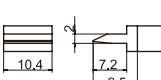


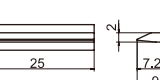




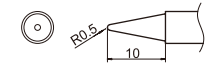
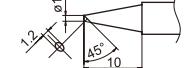


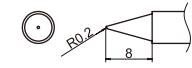
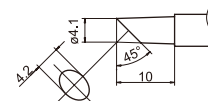
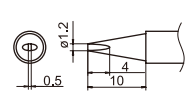
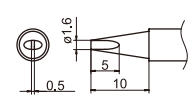
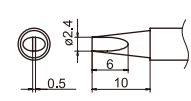
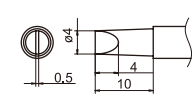
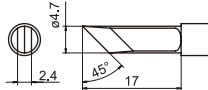
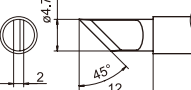
● <b>Desolder Control Box</b>	
Power Consumption	12 W
Output	24 V
Vacuum Generator	Ejector type
Vacuum Pressure(max.)	93 kPa (700 mmHg)
Suction Flow	20 L/min.
Tip to Ground Potential	<2mV
Applied Air Pressure	490 kPa (5.0 kgf/cm <sup>2</sup> ) when in use (trigger or button is pressed)
Compressed Air Consumption	1.62 c.f.m. (46 L/min.)
Dimension	119(W) x 45(H) x 172(D)mm
Weight (w/o cord & hose)	1.2 kg

<div>Standard type</div> <div></div>					
B	T12-B Shape-B	T12-B2 Shape-0.5B	T12-B3 Shape-0.7B	T12-B4 Shape-0.4B	T12-BL Shape-BL
					
BC	T12-BC1 Shape-1BC T12-BCF1*	T12-BC2 Shape-2BC T12-BCF2*	T12-BC3 Shape-3BC T12-BCF3*	T12-BCM2 Shape-2BC Bevel with indent	T12-BCM3 Shape-3BC Bevel with indent
					
C	T12-C08 Shape-0.8C	T12-C1 Shape-1C	T12-C4 Shape-4C T12-CF4*		
					
D	T12-D08 Shape-0.8D	T12-D12 Shape-1.2D	T12-D16 Shape-1.6D	T12-D24 Shape-2.4D	T12-D4 Shape-4D
					
	T12-D52 Shape-5.2D	T12-DL08 Shape-0.8DL	T12-DL12 Shape-1.2DL	T12-DL32 Shape-3.2DL	T12-DL52 Shape-5.2DL
					
I	T12-I Shape-I	T12-IL Shape-IL	T12-ILS Shape-ILS		
J	T12-J02 Shape-0.2J	T12-JL02 Shape-0.2JL	T12-JS02 Shape-0.2JS		
					
K	T12-K Shape-K	T12-KF Shape-KF	T12-KL Shape-KL	T12-KR Shape-KR	T12-KU Shape-KU
					

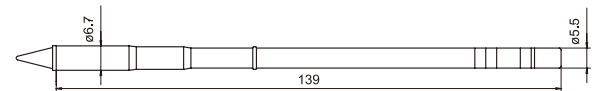
\* These tips are tinned on the soldering surface only.

<div>Concave type</div>	
T12-1610	T12-1612
	

<div>SMD type</div>					
Quad	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
					
Tunnel	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	
					
	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
					
Spatula	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
					
	T12-1401 Spatula 10.4	T12-1402 Spatula 15.7	T12-1403 Spatula 21.2	T12-1404 Spatula 25	T12-1405 Spatula 32
					
	T12-1406 Spatula 40				
					

<div>Long life type</div>					
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)	
					
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)	
					
T12-KFZ Shape-KF (Z)	T12-KRZ Shape-KR (Z)				
					

\* These tips are tinned on the soldering surface only.

<div>Heavy duty type</div> <div></div>					
T12-WB2 Shape-0.5WB	T12-WD08 Shape-0.8WD	T12-WD12 Shape-1.2WD	T12-WD16 Shape-1.6WD	T12-WD52 Shape-5.2WD	T12-WI Shape-WI
