SPECIFICATION

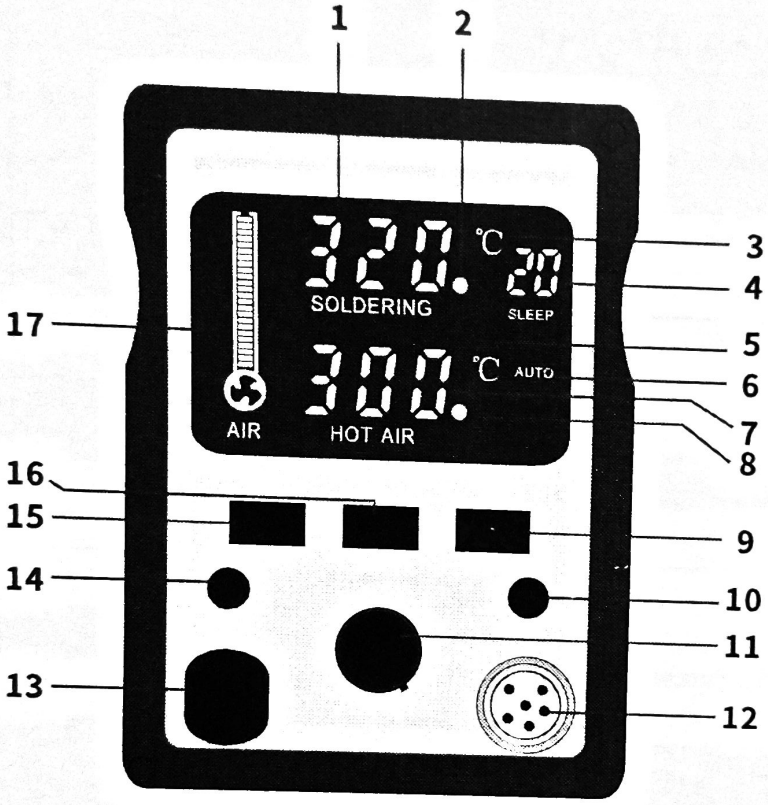
Dimensions	L148xW99xH134mm ±5mm
Operating ambient temperature	0°C~40°C/32°F~104°F
Hot Air Rework Station	
Airflow type	Brushless fan with soft air delivery
Airflow capacity	≤120L/min
Temperature range	100°C~480°C/212°F~896°F
Display	LCD
Soldering Station	
Temperature range	200°C~480°C/392°F~896°F
Display	LCD
Soldering tip to ground resistance	<2 ohms

I. APPLICATIONS

1. ***This unit is suitable for the de-soldering & soldering applications on a broad range of components, such as SOIC, CHIP, QFP, PLCC, BGA, SMD etc. and especially suitable for de-soldering in-line sockets.***

2. ***It can be used for heat shrinking, drying, paint stripping, adhesive removal, ice-out, pre-heating, glue soldering, etc.***

II. CONTROL PANEL GUIDE



1. Temperature Display (Soldering Station)
2. Operation Indicator (Soldering Station)
3. Fahrenheit / Celsius Indicator (Soldering Station)
4. Sleep Mode Timer (Soldering Station)
5. Fahrenheit / Celsius Indicator (Hot Air Rework Station)
6. Manual / Automatic Indicator (Hot Air Rework Station)
7. Temperature Display (Hot Air Rework Station)
8. Operation Indicator (Hot Air Rework Station)
9. Preset Channel 3
10. Power Switch (Soldering Station)
11. Air Volume Adjustment Knob / Function Button
12. Receptacle (Soldering Iron)
13. Receptacle (Hot Air Gun)
14. Power Switch (Hot Air Rework Station)
15. Preset Channel 1
16. Preset Channel 2
17. Air Volume (Simulated Value)

III. OPERATION

Hot Air Rework Station

1. Set the rework station correctly, and install the hot air gun holder on the left side of the station, and then place the hot air gun onto the holder.

2. Install the required nozzle (Use of nozzles in larger diameters is recommended). Connect the station's power cord to an electrical outlet.

3. Turn ON the master power switch located at the rear of the station, then turn ON the hot air gun's power switch. The hot air rework station's temperature display will show "---" to indicate the gun in standby mode. Set the desired temperature, then pick up the hot air gun, and it will enter standard operation mode, the hot air rework station's operation indicator light will turn ON.

Indicator for program making real-time temperature tracking & compensation

The operation indicator light will stay ON constantly when the hot air gun is heating up, blink rapidly when the temperature stabilizes, and be turned OFF when the hot air gun is cooling off. Adjust the air volume adjustment knob to set the desired air volume, and begin operation once the temperature has stabilized. Once the temperature has stabilized , its status is clearly indicated with the rapidly flashing operation indicator. The precision PID program is tracking and compensating the hot air gun's temperature every millisecond, the hot air gun's temperature is now in stable, and precise thermostatic state.

4. When the operation is complete, set the hot air gun's manual/automatic mode to automatic before placing the hot air gun back to its holder. After this procedure, the hot air gun will cut its power to the heating element automatically, and turn OFF the operation indicator light. The hot air gun will not heat up and only put air out to cool the heating element. When the temperature drops below 100°C (212°F), the hot air rework station's temperature display will show "--- ". Turn OFF the hot air rework station's power switch at this point. If the station is not in use for an extended period, you MUST turn OFF the master switch and DISCONNECT the station's power plug.

Soldering Station

1. Connect the soldering iron to the station, and place the iron into its holder.

2. Turn ON the station's master switch located at the rear of the station, and then turn ON the soldering station's power switch. The soldering station's heating element will begin heating as per normal, and its operation indicator light will turn ON. The operation indicator light will stay constantly ON when the soldering iron is heating up, blink rapidly when the temperature stabilizes, and be turned OFF when the soldering iron is cooling off. Begin your operation once the soldering station's indicator is blinking rapidly to indicate the temperature's stabilization.

CAUTION: Upon the first use of the soldering iron tip, set the temperature to 250°C/482°F. When the iron is just hot enough to melt the solder, coat the soldering iron tip with a layer of solder (the use of rosin core solder is recommended), then increase the temperature to your desired value.

Indicator for program making real-time temperature tracking & compensation

3. When the operation is complete, use a wet sponge or metal wool ball to clean the soldering iron tip. Tin the tip with a new layer of solder, then put the soldering iron back to its holder and turn OFF the soldering station's power switch. If the station is not in use for an extended period, you must turn OFF the master switch and DISCONNECT the power cord.

Temperature Setting (Soldering Station)

1. Turn ON the soldering station's power switch ONLY. Press the function button 1 time, and the 'SOLDERING' indicator words will blink.
2. Turn the function button clockwise or anticlockwise to set the desired temperature for the soldering station. Stop operating for approximately 4 seconds, and the 'SOLDERING' indicator words will stop blinking. The system saves the data and exits the setting interface – Setting complete.

Temperature Setting (Hot Air Rework Station)

1. Turn ON the hot air rework station's power switch ONLY . Press the function button 1 time, and the 'HOT AIR' indicator words will blink.
2. Turn the function button clockwise or anticlockwise to set the desired temperature for the hot air rework station. Stop operating for approximately 4 seconds, and the 'HOT AIR' indicator words will stop blinking, the system saves the data and exits the setting interface – Setting complete.

Sleep Mode (Soldering Station)

This function helps extend the lifespan of the soldering iron, conserve energy, and protect the environment.

1. Turn ON the soldering station's power switch ONLY , then press the function button 2 times. 'SLEEP' indicator words will blink.
2. Turn the function button clockwise or anticlockwise to set the desired sleep timer duration. Stop operating for approximately 4 seconds, and the 'SLEEP' indicator words will stop blinking, the system saves the data and exits the setting interface - Setting complete. (Sleep timer duration can be set from 0 to 99 minutes. Set the duration value to 00 to turn OFF the sleep mode.)

To start-up the soldering station from sleep mode:
A.Shake the soldering iron a few times,
B.Press any button
OR C. Turn OFF then turn ON the station.

Automatic / Manual Mode (Hot Air Rework Station)

Select the hot air rework station's manual or automatic mode based on the usage frequency of the hot air rework station. This can help improve work efficiency and safety factors.

1. Turn ON the hot air rework station's power switch ONLY. Press the function button 2 times, and the 'AUTO' or 'MANUAL' indicator word will blink.
2. Turn the function button CLOCKWISE to set the hot air rework station to Automatic Mode (AUTO) or ANTICLOCKWISE to set the hot air rework station to Manual Mode (MANUAL). Stop operating for approximately 4 seconds, and the selected mode's indicator will stop blinking. The system will save the setting and exit the setting interface - Setting complete.

°F/°C Temperature Display

This function allows the station to adapt to user preferences in different regions.

1. Turn ON the soldering station's power switch ONLY. Press the function button 3 times, and the '°C' or '° F' value will blink.
2. Turn the function button CLOCKWISE to select the Celsius (°C) Mode or ANTICLOCKWISE to select the Fahrenheit (°F) mode. Stop operating for approximately 4 seconds, and the selected temperature unit indicator will stop blinking. The system will save the data and exit the setting interface - Setting complete.

Digital Temperature Calibration

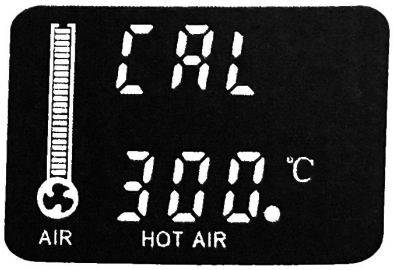
Temperature discrepancies may occur due to the change in the environment's temperature, or due to the replacement of the heating element and other components. You can correct the discrepancies with this function. The temperature calibration function can improve work efficiency and prolong the lifespan of the soldering iron.

Soldering Station

1. Turn ON the soldering station's power switch, and allow the soldering station to heat up to the set temperature.
2. Press and hold both the soldering station's power switch and the 'CH3' button for approxi-mately 2 seconds, and the display will show indicators as shown in the graph.
3. Turn the function button to enter the temperature value measured from the soldering tip, then press the function button to confirm entry and exit the setting interface – Setting complete. If minor temperature discrepancies remain, repeat the calibration procedures.

Hot Air Rework Station

1. Turn ON the hot air rework station's power switch, and allow the hot air rework station to heat up to the set temperature.
2. Press and hold both the hot air rework station's power switch and 'CH1' button for approximately 2 seconds. The display will show indicators, as shown in the graph.
3. Turn the function button to enter the measured temperature value, and press the function button to confirm entry – Setting complete. If minor temperature discrepancies remain, repeat the calibration procedures.



Zero-Air Protection Function

If the hot air gun stops putting out air abnormally in operation, the system will cut the power to the heating element. This prevents damages to the hot air gun due to accumulated heat and further improves the safety factor of this product.

Preset Channels (3 Channels Available)

1. Turn ON the master switch located at the rear of the station, then turn ON the soldering station and the hot air rework station's power switches.
2. Press the CH1 button to display the current settings. Each press of the function button will bring you the setting interface for these parameters in the following order: soldering station temperature > hot air gun temperature > soldering station sleep timer duration > hot air rework station automatic or manual mode > °F or °C display mode. The system will save the data and exit the setting interface once the setting procedure is complete – CH1 (Preset Channel 1) setting complete. The procedure to enter setting data for CH2/CH3 is identical to that for CH1.

NOTE: soldering station sleep timer duration / hot air rework station manual or automatic mode / °F or °C display mode are shared parameters across the 3 preset channels. Once you change them in one of the channels, the change will be synchronized in other channels.

Cool Air Mode

Once the hot air gun is started, press, and hold the function button for approximately 2 seconds, and the displayed temperature will begin dropping.. When the hot air gun's temperature is lower than 90 °C (194°F), the station will enter cooling mode. Press and hold the function button for approximately 2 seconds again to return the station to the standard hot air mode.

IV. MAINTENANCE AND PRECAUTIONS

Hot Air Rework Station

1. Keep the air outlet clear and free of blockages at all times.

2. The installation of the hot air nozzles MUST be carried out ONLY when the steel pipe and nozzles have cooled. Install the nozzle correctly. DO NOT install the nozzle with brute force , pull the edge of the nozzle with tweezers, or over-tighten the screws.
3. Select the appropriate nozzle based on your operation requirement (temperatures may vary when you use nozzles in different diameters). When using nozzles smaller than the stock nozzles, you MUST use the maximum air volume with a relatively lower temperature setting. Complete this operation in the shortest possible duration to prevent damaging the hot air gun.

4. Keep a minimum distance of 2mm between the object and the subject and the hot air gun's air outlet.

5. DO NOT allow the hot air to come in direct contact with facial parts: Risk of burn injuries. Upon the first use, the hot air gun may emit white fumes, and the white fume will dissipate in a short while.

NOTE:
The station's hot air gun and soldering iron handles use high-strength stainless steel tubes. The station goes through 4 or more testing, inspection, and calibration procedures before rolling off the assembly line. The steel tube may exhibit light bronze color as a result of our quality control efforts. It is normal to have a slightly bronzed steel tube when you use a brand-new station, rest assured for regular usage.

Soldering Station

1. If a layer of oxidization forms on the surface of the soldering iron tip, a misconception can be created that the soldering tip cannot heat up properly to melt the solder and do the tinning. But the actual temperatures of both the heating element and soldering tip are high. In such an instance, please do not increase the temperature value confusedly but use a metal wool ball to remove the oxidization following the steps below:

A. ***Set the temperature to 300°C (572°F).***
B. ***Once the temperature stabilizes, gently rub the soldering iron tip inside the metal wool ball.***
C. ***When the oxidization is partially removed, continue applying solder while rubbing until the soldering tip is completely coated with solder. If the soldering iron tip is too severely oxidized beyond cleaning, replace the tip with a new one.***

2. DO NOT use metal files to remove the oxidization on the soldering iron tip. If the soldering iron tip deforms or rusts, replace the tip with a new tip.

3. DO NOT apply excessive force on the soldering iron tip when soldering. Doing so will not only damage the tip but also not improve the heat transfer.

4. When placing the soldering iron back in the holder to idle after a high-temperature operation, adjust the temperature to 250°C (482°F) or below for idling. Failure to do so, and leaving the soldering iron tip to idle on a high-temperature setting will cause the accelerated aging of the heating element, and shorten the lifespan of the heating element and tip.

5. After every operation, always wipe off the soldering tip, then tin the tip with a layer of solder to prevent oxidization.

V. TROUBLESHOOTING GUIDE

1. "S-E" – This is an indication that the soldering station's/hot air gun's sensor module is faulty. You need to replace the heating element (the heating element and sensor modules) .Or the handle is not connected (Turn OFF the station, have the handle connected ,then turn ON the station)

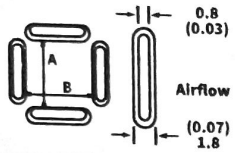
2. "F-1/F-2" – This is an indication that the station is in the "zero-air protection" mode. In such an instance, check the hot air gun and the hot air gun's power circuitry.

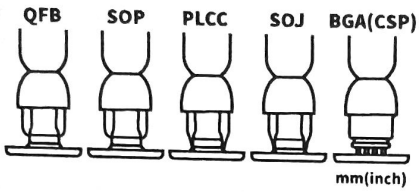
3. When replacing the heating element, take note of the original connecting order and colors of the wires which MUST NOT be connected incorrectly.

For reference: compatible parts

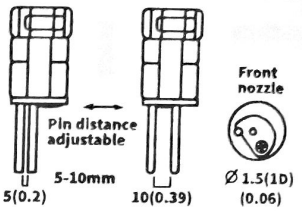
Nozzle style (specifications and sizes)

The nozzles sizes match with their corresponding IC sizes.

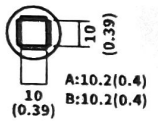




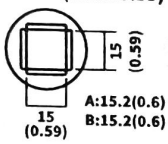
A1325
Single-tube
ϕ1.5x5.10
(0.06x0.02-0.39)
Pin distance adjustable



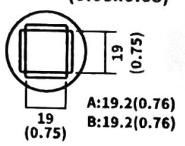
A1125 QFP 10x10 (0.39x0.39)



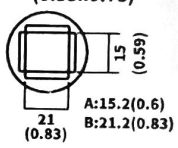
A1126 QFP 14x14 (0.55x0.55)



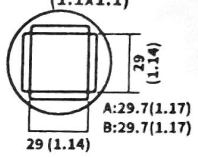
A1127 QFP 17.5x17.5 (0.68x0.68)



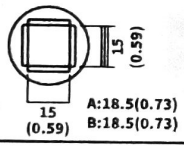
A1128 QFP 14x20 (0.55x0.78)



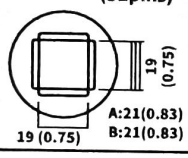
A1129 QFP 28x28 (1.1x1.1)



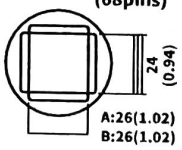
A1135 PLCC 17.5x17.5 (0.68x0.68) (44pins)



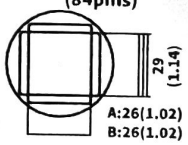
A1136 PLCC 20x20 (0.78x0.78) (52pins)



A1137 PLCC 25x25 (0.98x0.98) (68pins)

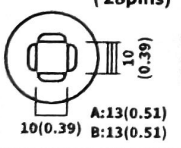


A1138 PLCC 30x30 (1.18x1.18) (84pins)

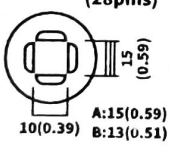


A1139 PLCC 12.5x7.3 (0.49x0.49) (18pins)

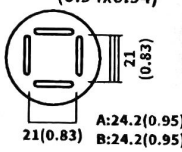
A1140 PLCC 11.5x11.5 (0.45x0.45) (28pins)



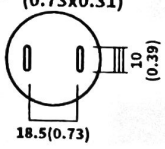
A1141 PLCC 11.5x14 (0.45x0.55) (28pins)



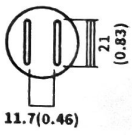
A1182 BOFP 24x24 (0.94x0.94)



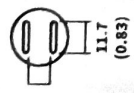
A1187 TSOL 18.5x8 (0.73x0.31)



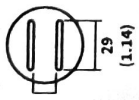
A1257 SOP 11x21 (0.43x0.83)



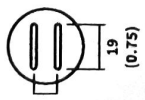
A1258



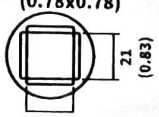
A1259 SOP 13x28 (0.51x1.1)



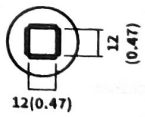
A1260 SOP 8.6x18 (0.34x0.71)



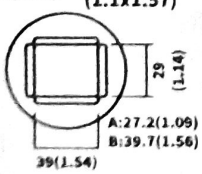
A1261 OFP 20x20 (0.78x0.78)



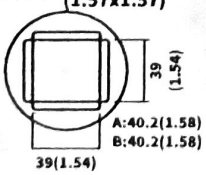
A1262 OFP 12x12 (0.47x0.47)



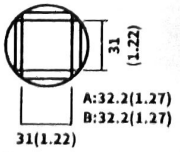
A1263 QFP 28x40 (1.1x1.57)



A1264 QFP 40x40 (1.57x1.57)



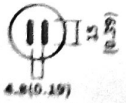
A1265 QFP 32x32 (1.26x1.26)



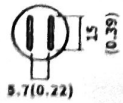
A1124 Single-tube ϕ2.5 (1.1x1.57)

A1130 Single-tube ϕ4.4 (0.17)

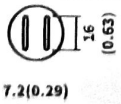
A1131 SOP 4.4x10 (0.17x0.39)



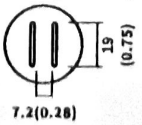
A1132 SOP 5.6x13 (0.22x0.51)



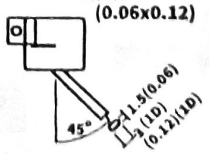
A1133 SOP 7.5x15 (0.3x0.59)



A1134 SOP 7.5x18 (0.3x0.7)

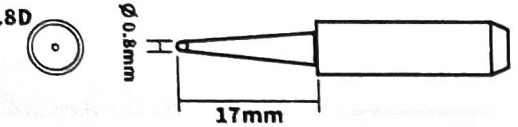
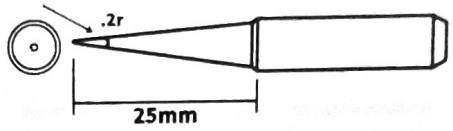
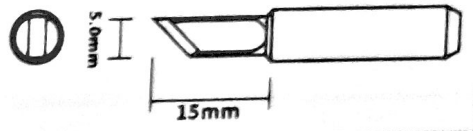
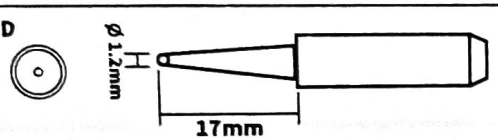
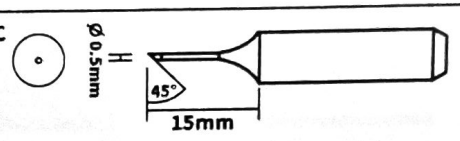
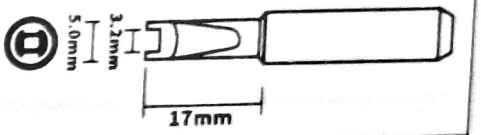
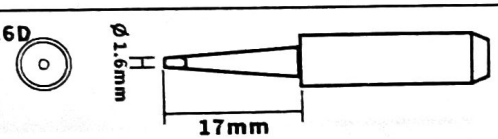
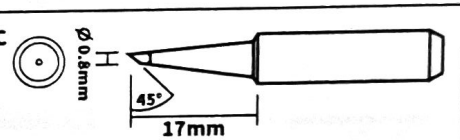
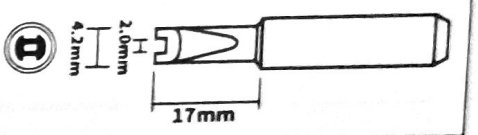
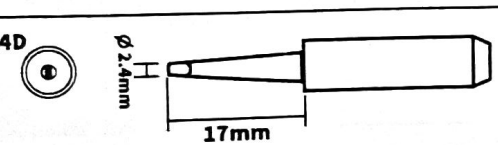
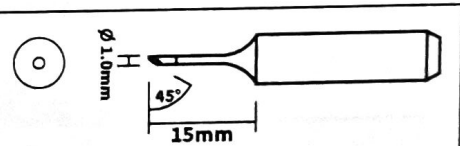
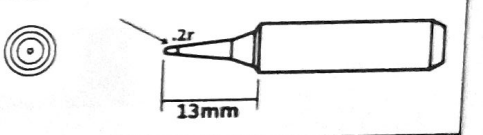
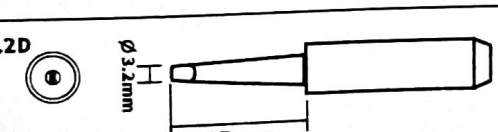
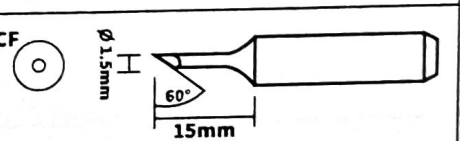
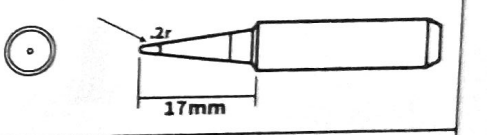
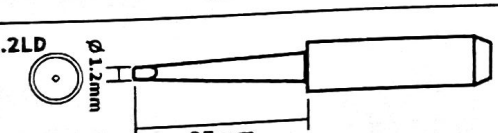
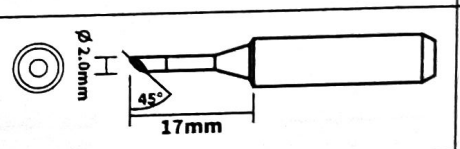
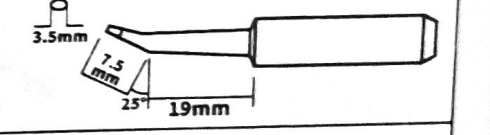
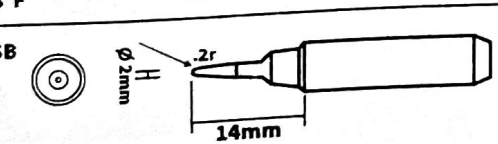
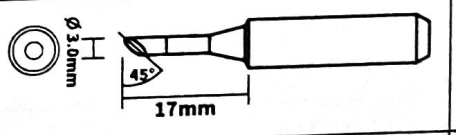
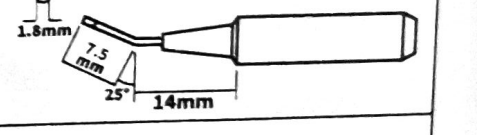
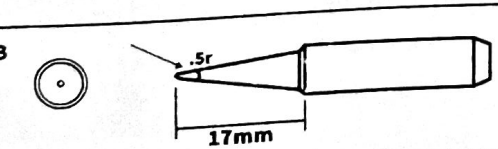
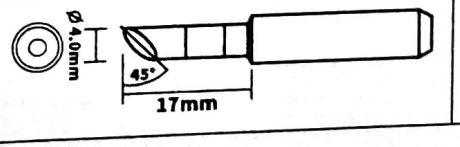
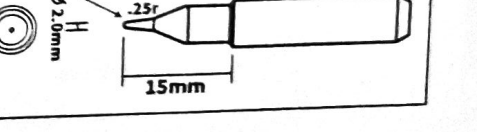


A1142 Curved single tube 1.5x3 (0.06x0.12)



Tip style （specifications and sizes)

900M Series Tip Out Diam ϕ 6.5mm

900M-T-0.8D  0°C	900M-T-LB  -10°C/-18°F	900M-T-K  30°C/54°F
900M-T-1.2D  0°C	900M-T-0.5C  0°C	900M-T-R  0°C
900M-T-1.6D  0°C	900M-T-0.8C  0°C	900M-T-RT  0°C
900M-T-2.4D  0°C	900M-T-1C  0°C	900M-T-SI  0°C
900M-T-3.2D  0°C	900M-T-1.5CF  0°C	900M-T-I  -10°C/-18°F
900M-T-1.2LD  -10°C/-18°F	900M-T-2C  0°C	900M-T-H  -20°C/-36°F
900M-T-SB  0°C	900M-T-3C  0°C	900M-T-1.8H  -10°C/-18°F
900M-T-B  0°C	900M-T-4C  0°C	900M-T-S4  0°C