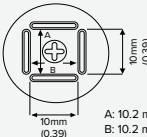
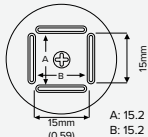
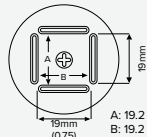
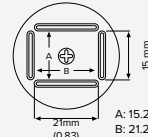
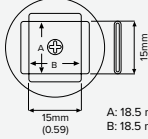
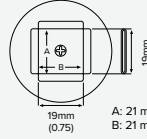
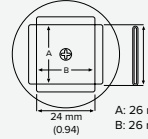
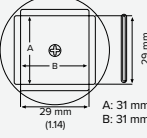
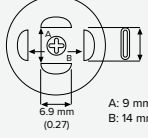
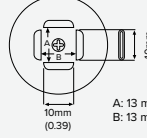
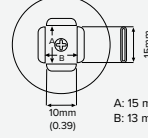
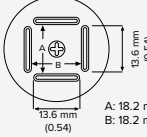
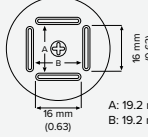
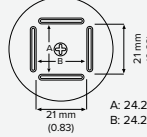
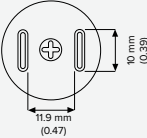
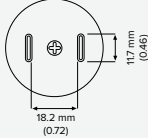
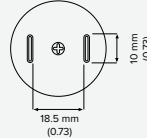
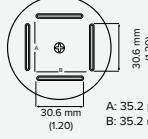
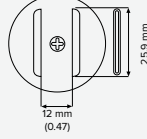
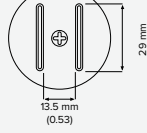
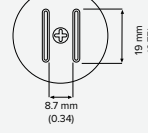




## HOT AIR SERIES NOZZLES FOR USE WITH FR-811, FR-810B, FR-803B, FR-802 & FR-801

UNIT: mm(inch)

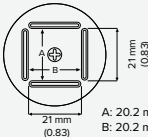
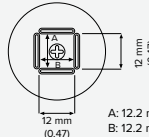
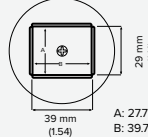
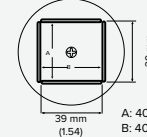
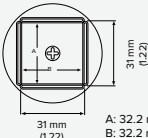
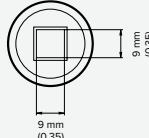
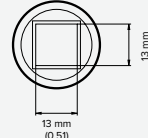
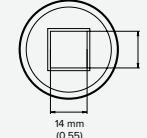
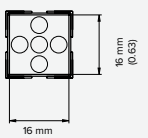
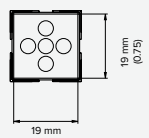
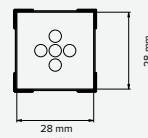
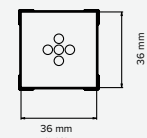
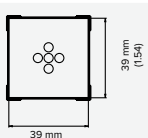
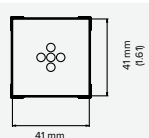

|  |   |   |   |
|--|---|---|---|
| <b>A1125B</b> (QFP, 10.2 x 10.2)<br><br>A: 10.2 mm (0.40)<br>B: 10.2 mm (0.40)        | <b>A1126B</b> (QFP, 15.2 x 15.2)<br><br>A: 15.2 mm (0.60)<br>B: 15.2 mm (0.60)             | <b>A1127B</b> (QFP, 19.2 x 19.2)<br><br>A: 19.2 mm (0.76)<br>B: 19.2 mm (0.76)            | <b>A1128B</b> (QFP, 15.2 x 21.2)<br><br>A: 15.2 mm (0.6)<br>B: 21.2 mm (0.83)    |
| <b>A1129B</b> (QFP, 28.2 x 28.2)<br><br>A: 28.2 mm (1.17)<br>B: 28.2 mm (1.17)        | <b>A1135B</b> (PLCC-44, 18.5 x 18.5)<br><br>A: 18.5 mm (0.73)<br>B: 18.5 mm (0.73)         | <b>A1136B</b> (PLCC-52, 21 x 21)<br><br>A: 21 mm (0.83)<br>B: 21 mm (0.83)                | <b>A1137B</b> (PLCC-68, 26 x 26)<br><br>A: 26 mm (1.02)<br>B: 26 mm (1.02)       |
| <b>A1138B</b> (PLCC-84, 31 x 31)<br><br>A: 31 mm (1.22)<br>B: 31 mm (1.22)            | <b>A1139B</b> (PLCC-18, 9 x 14)<br><br>A: 9 mm (0.35)<br>B: 14 mm (0.55)                   | <b>A1140B</b> (PLCC-28, 13 x 13)<br><br>A: 13 mm (0.51)<br>B: 13 mm (0.51)                | <b>A1141B</b> (PLCC-32, 15 x 13)<br><br>A: 15 mm (0.59)<br>B: 13 mm (0.51)       |
| <b>A1180B</b> (BQFP-84, 18.2 x 18.2)<br><br>A: 18.2 mm (0.72)<br>B: 18.2 mm (0.72)  | <b>A1181B BQFP</b> (BQFP-100, 19.2 x 19.2)<br><br>A: 19.2 mm (0.76)<br>B: 19.2 mm (0.76) | <b>A1182B BQFP</b> (PLCC-28, 24.2 x 24.2)<br><br>A: 24.2 mm (0.95)<br>B: 24.2 mm (0.95) | <b>A1184B SOJ</b> (SOJ, 19 x 10)<br><br>A: 19 mm (0.75)<br>B: 10 mm (0.39)     |
| <b>A1185B</b> (TSOL, 10 x 13)<br><br>A: 10 mm (0.39)<br>B: 13 mm (0.51)             | <b>A1186B</b> (TSOL, 19.2 x 19.2)<br><br>A: 19.2 mm (0.76)<br>B: 19.2 mm (0.76)          | <b>A1187B</b> (TSOL, 8 x 18.5)<br><br>A: 8 mm (0.31)<br>B: 18.5 mm (0.73)               | <b>A1188B</b> (PLCC-20, 10 x 10)<br><br>A: 10 mm (0.39)<br>B: 10 mm (0.39)     |
| <b>A1189B</b> (PLCC-100, 36.5 x 36.5)<br><br>A: 36.5 mm (1.44)<br>B: 36.5 mm (1.44) | <b>A1203B</b> (BQFP-196, 35 x 35)<br><br>A: 35.2 mm (1.39)<br>B: 35.2 mm (1.39)          | <b>A1214B</b> (SOJ, 27 x 12)<br><br>A: 27 mm (1.06)<br>B: 12 mm (0.47)                  | <b>A1215B</b> (QFP, 42.5 x 42.5)<br><br>A: 42.5 mm (1.67)<br>B: 42.5 mm (1.67) |
| <b>A1257B</b> (SOP, 21 x 11.7)<br><br>A: 21 mm (0.83)<br>B: 11.7 mm (0.46)          | <b>A1258B</b> (SOP, 11.7 x 8.2)<br><br>A: 11.7 mm (0.46)<br>B: 8.2 mm (0.32)             | <b>A1259B</b> (SOP, 29 x 13.5)<br><br>A: 29 mm (1.14)<br>B: 13.5 mm (0.53)              | <b>A1260B</b> (SOP, 19 x 8.7)<br><br>A: 19 mm (0.75)<br>B: 8.7 mm (0.34)       |





## HOT AIR SERIES NOZZLES FOR USE WITH FR-811, FR-810B, FR-803B, FR-802 & FR-801



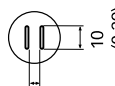
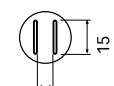
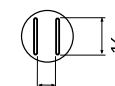
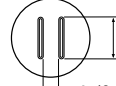
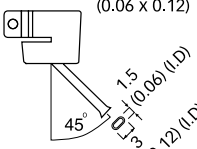
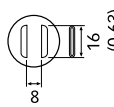
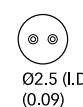
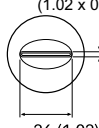
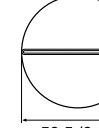
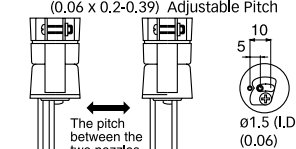
UNIT: mm(inch)

|   |   |  |   |
|---|---|--|---|
| <b>A1261B</b> (QFP, 20.2 x 20.2)<br><br>21 mm (0.83)<br>A: 20.2 mm (0.80)<br>B: 20.2 mm (0.80) | <b>A1262B</b> (QFP, 12.2 x 12.2)<br><br>12 mm (0.47)<br>A: 12.2 mm (0.48)<br>B: 12.2 mm (0.48) | <b>A1263B</b> (QFP, 27.7 x 39.7)<br><br>29 mm (1.14)<br>39 mm (1.54)<br>A: 27.7 mm (1.09)<br>B: 39.7 mm (1.56) | <b>A1264B QFP</b> (QFP, 40.4 x 40.4)<br><br>39 mm (1.54)<br>A: 40.2 mm (1.58)<br>B: 40.2 mm (1.58) |
| <b>A1265B</b> (QFP, 32.2 x 32.2)<br><br>31 mm (1.22)<br>A: 32.2 mm (1.27)<br>B: 32.2 mm (1.27) | <b>A1470</b> (BGA, 9 x 9)<br><br>9 mm (0.35)   | <b>A1471</b> (BGA, 13 x 13)<br><br>13 mm (0.51)  | <b>A1472</b> (BGA, 14 x 14)<br><br>14 mm (0.55)  |
| <b>A1473</b> (BGA, 16 x 16)<br><br>16 mm (0.63)  | <b>A1474</b> (BGA, 19 x 19)<br><br>19 mm (0.75)  | <b>A1475</b> (BGA, 28 x 28)<br><br>28 mm (1.10)  | <b>A1476</b> (BGA, 36 x 36)<br><br>36 mm (1.42)  |
| <b>A1477</b> (BGA, 39 x 39)<br><br>39 mm (1.54)   | <b>A1478</b> (BGA, 41 x 41)<br><br>41 mm (1.61)   |  <p>For more information on the Hot Air Series Nozzles Scan QR Code.</p>                                      |   |

REWORK

### VACUUM FUNCTION INOPERATIVE NOZZLES

When attaching the nozzle to the Hakko FR-803B, FR-810B or FR-811

|  |   |   |   |  |   |
|--|---|---|---|--|---|
| <b>A1124B Single</b> Ø2.5 (0.09)<br><br>Ø2.5 (I.D.) (0.09)                                  | <b>A1130 Single</b> Ø4.4 (0.17)<br><br>Ø4.4 (I.D.) (0.17)          | <b>A1131 SOP</b> 4.8 x 10 (0.19 x 0.39)<br><br>4.8 (0.19)                        | <b>A1132 SOP</b> 5.7 x 15 (0.22 x 0.59)<br><br>5.7 (0.22)         | <b>A1133 SOP</b> 7.2 x 16 (0.28 x 0.62)<br><br>7.2 (0.28)             | <b>A1134 SOP</b> 7.2 x 19 (0.28 x 0.75)<br><br>7.2 (0.28)  |
| <b>A1142B Bent Single</b> 1.5 x 3 (0.06 x 0.12)<br><br>1.5 (0.06) (I.D.)<br>3 (0.12) (I.D.) | <b>A1183 SOJ</b> 16 x 8 (0.63 x 0.31)<br><br>16 (0.63)<br>8 (0.31) | <b>A1190 Dual Single</b> 2.5 x 9.5 Pitch (0.09 x 0.37)<br><br>Ø2.5 (I.D.) (0.09) | <b>A1191 SIP</b> 26 x 2 (1.02 x 0.08)<br><br>2 (0.08)<br>26 (1.02) | <b>A1192 SIP</b> 52.5 x 2 (2.07 x 0.08)<br><br>2 (0.08)<br>52.5 (2.07) | <b>A1325 Dual Single</b> ø1.5 x 5-10 (0.06 x 0.2-0.39) Adjustable Pitch<br><br>The pitch between the two nozzles is adjustable.<br>5 (0.2) 10 (0.39)<br>ø1.5 (I.D.) (0.06) |