DME

AUTO-FIXED™ INTEGRAL HEATER™ PROBES

INSTALLATION DATA

Please read carefully before installing probes.

REFER TO MINI-PRINTS NOS. 1300 AND 1500

AND DATA SHEET NO. 1315

NOTE: PROBE DISCOLORATION

Each Integral Heater probe sold by DME is pretested. This procedure discolors the outer surface of the probe, but in no way alters its performance or dimensions.

To prevent heater lead damage on probes utilizing 90° leads it is necessary to key or dowel the probe head to prevent probe from rotating when tightening hold down nut.

PROBE DIMENSIONS

IMPORTANT: DIMENSIONS SHOWN IN PARENTHESES APPLY TO LARGER PROBES AFIPS-372 THRU 622 ONLY. TOLERANCES SHOWN ALSO APPLY TO DIMENSIONS IN PARENTHESES.

<table>
<thead>
<tr>
<th>ITEM</th>
<th>USED WITH AFIP4-322 (90) THRU 472 (90)</th>
<th>USED WITH AFIPS-372 (90) THRU 622 (90)</th>
</tr>
</thead>
<tbody>
<tr>
<td>HOLD DOWN NUT</td>
<td>AFN-100</td>
<td>AFN-100</td>
</tr>
<tr>
<td>THERMOCOUPLE</td>
<td>TC-9900</td>
<td>TC-9900</td>
</tr>
<tr>
<td>ADJUSTMENT RING</td>
<td>RAF4-062</td>
<td>RAF5-062</td>
</tr>
<tr>
<td>REGISTER RING</td>
<td>AFRR-04N</td>
<td>AFRR-05N</td>
</tr>
<tr>
<td>GATE INSERT</td>
<td>AFGI-04N</td>
<td>* AFGI-05N</td>
</tr>
</tbody>
</table>
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INITIAL PROBE SET-UP DIMENSIONS

**PROBE MACHINING DIMENSIONS - SOLID BLOCK DESIGN**

**PROBE MACHINING DIMENSIONS - SPLIT PLATE DESIGN**

**INSTALLATION CHECKLIST**

1) .875 Diameter Counterbore
   * Is the thread depth sufficient to permit full tightening of the probe against the flat surface of the counterbore or adjustment ring?

2) .395 Diameter Probe Bore
   * Is the "A" dimension within the specified range?

3) Probe Set-Up Dimension
   * Refer to chart. Check "X" dimension.

**THERMOCOUPLE (T/C) AND HEATER LEAD WIRES**

* White and Red wires are thermocouple leads.
* White is Positive (+) and magnetic (iron).
* Red is Negative (-) (constantan).
* Black wires are Power leads.

**IMPORTANT, Dimensions shown in parentheses apply to larger probes AFIPS-372 thru 5-622 only. Tolerances shown also apply to dimensions in parentheses.**

**GATE MACHINING DIMENSIONS (SOLID BLOCK OR SPLIT PLATE DESIGN)**

**NOTE:** X dimension is for initial probe set-up and may require further adjustment. Final position of probe tip will be determined by gate cosmetics and flow requirements.

**REFER TO MINI PRINTS 1300, 1400, 1500 AND 1600 FOR GUIDELINES OTHER THAN THOSE SHOWN.**