Probes

- Probe identifiers begin with “U” and are created from the probe diameter (8 mm, 12 mm etc.) and the body style (B or C).
  
  For example, a U8B probe is an 8 mm probe with a “B” body style.

- Extension cables must be factory calibrated with the system.

- Targets must be 3 times larger than probe diameter or custom calibration will be required.

Operating Environment

Probes are available in two environmental ranges:

- Standard: -25°C to 125°C, IP67

- High-Temperature: U3-U18: -25°C to 200°C, IP63
  U25-U50: -25°C to 175°C, IP63

Vacuum compatible option available for most probes.

Larger Probe = Larger Range

Custom ranges are available.

Measurement Ranges

<table>
<thead>
<tr>
<th>Probe</th>
<th>Minimum Target Diameter mm/ in</th>
<th>Standard Range Near Gap mm/inch</th>
<th>Near Gap mm/inch</th>
<th>Fine Range (ECL202 Only) Range mm/inch</th>
<th>Near Gap mm/inch</th>
</tr>
</thead>
<tbody>
<tr>
<td>U3</td>
<td>9/0.35</td>
<td>0.50/0.020</td>
<td>0.05/0.002</td>
<td>0.25/0.010</td>
<td>0.05/0.002</td>
</tr>
<tr>
<td>U5</td>
<td>15/0.60</td>
<td>1.25/0.050</td>
<td>0.25/0.10</td>
<td>0.625/0.025</td>
<td>0.25/0.10</td>
</tr>
<tr>
<td>U8</td>
<td>25/1.0</td>
<td>2.00/0.080</td>
<td>0.35/0.15</td>
<td>1.0/0.040</td>
<td>0.35/0.15</td>
</tr>
<tr>
<td>U12</td>
<td>36/1.4</td>
<td>3.50/0.140</td>
<td>0.60/0.025</td>
<td>1.6/0.065</td>
<td>0.60/0.025</td>
</tr>
<tr>
<td>U18</td>
<td>55/2.2</td>
<td>5.00/0.200</td>
<td>0.75/0.030</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>U25</td>
<td>75/3.0</td>
<td>8.00/0.320</td>
<td>1.25/0.050</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>U38</td>
<td>120/4.7</td>
<td>12.5/0.500</td>
<td>1.50/0.063</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>U50</td>
<td>150/6.0</td>
<td>15.0/0.600</td>
<td>2.00/0.080</td>
<td>—</td>
<td>—</td>
</tr>
</tbody>
</table>

Body Styles and Mechanical Detail

B

Threaded stainless steel body for threaded or thru-hole mounting.

C

Smooth stainless steel body for clamp or set-screw mounting.
Probe Cables

Cable length is three meters. Custom lengths are available. Extension cable length is measured from end-to-end including connectors. Standard temperature probe cables have PUR jackets. High-Temperature probes use PTFE.

Amored Cable

Armored cable is available on probes 12 mm (U12) and larger. The armor is only affixed at the probe end.

Mounting

Probes must be mounted to avoid interaction between the sensing field and the mounting hardware. The area within 3 probe diameters to the sides and 1.5 diameters behind should be kept clear of any metallic objects other than the object to be measured. Otherwise, custom calibration may be required.

Exports

Export Considerations: Because of high resolutions, export to some countries requires an export license. The ECL202 and ECL150 have 'e' versions (ECL202e, ECL150e) which have different resolution specifications and can ship without an export license. Contact us or see the lionprecision.com web site for details.