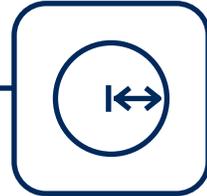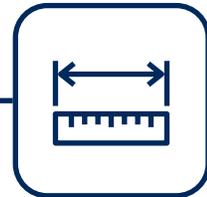# Determining Probe Sizing

For the HiTemp140-CF

Measure the Radius:

Determine the radius of your round container by measuring from the center to the edge. Record this measurement in inches.

Round Up:

Round the measured radius up to the nearest 0.1 inch to find the correct size to order. For example, The radius of a #603 can measures 3.09 inches, so it is rounded up to 3.1 inches.

Select the Product:

Based on the rounded measurement, select the corresponding product. For instance, a 3.1-inch measurement corresponds to ordering a HiTemp140-CF-3.1.

Irregular Shaped Containers:

For containers that are not round, measure the distance from the intended mounting location to the geometric center of the container. Use this measurement as if it were the radius.

Understanding Nominal Sizing:

Nominal sizing accounts for various uncertainties such as sensor positioning errors due to rounding, can deformation, and manufacturing tolerances. The RTD sensing element, which measures 0.12 inches in length, compensates for these factors by averaging the temperature over its length.