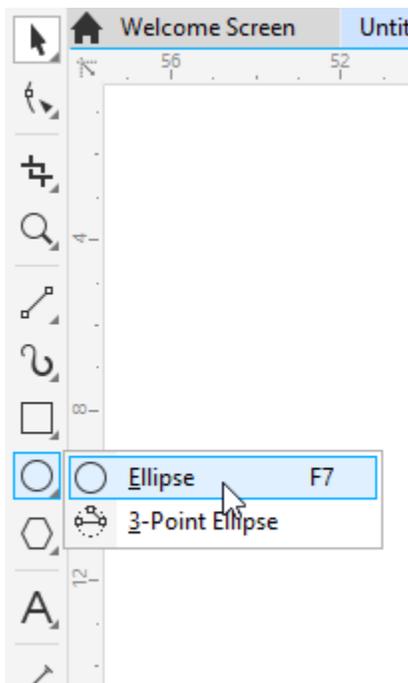


# How to Use the Ellipse Tools in CorelDRAW

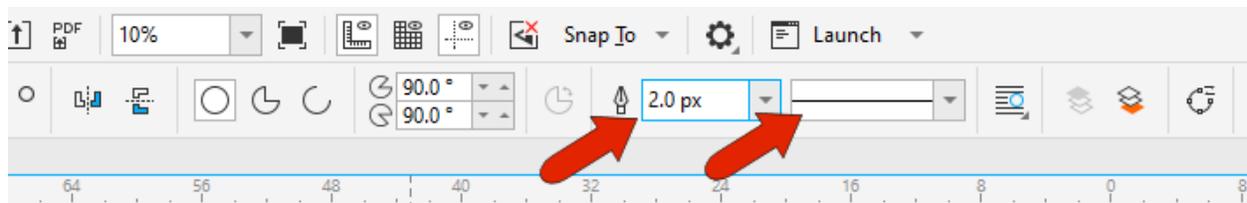
In this tutorial, we'll review 2 CorelDRAW tools for drawing circles and ellipses: the Ellipse tool and the 3-Point Ellipse tool. Learn the basics of using these tools, plus how to make modifications such as resizing, adding fill and outline colors, and creating pie and arc shapes.

## Ellipse Tool Basics

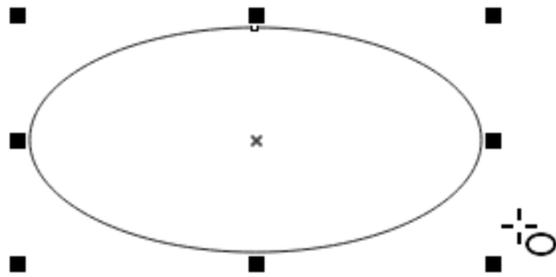
The **Ellipse** tool can be found on the **Toolbox** and can also be activated by the **F7** key on a PC, or the **E** key on the Mac.



The property bar displays the default outline width and line style for all graphic elements, which can be changed for an ellipse once it's created.



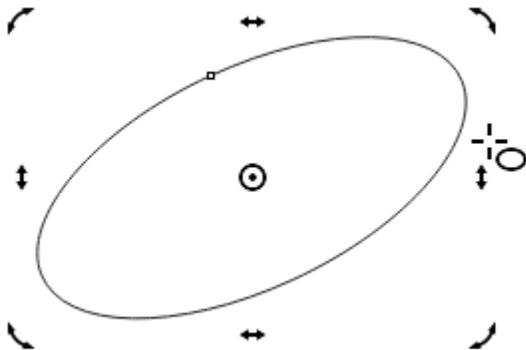
An ellipse is created by clicking and dragging from one corner to the opposite corner of the ellipse's bounding rectangle. Once created, the ellipse has 8 sizing handles all around, and an X at its center.



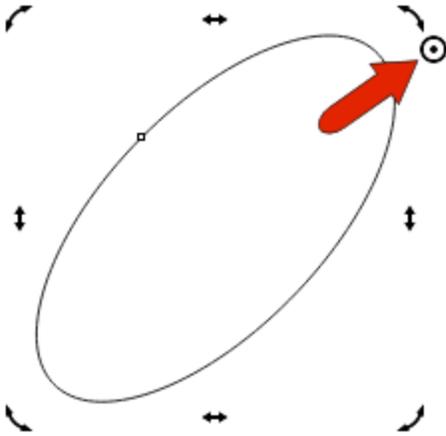
- To draw an ellipse from its center, hold the **Shift** key while dragging the mouse.
- To draw a circle, hold the **Ctrl** key (**Cmd** key for Mac users) while dragging the mouse.
- To draw a circle from its center, hold the **Shift** and **Ctrl/Cmd** key while dragging the mouse.

Corner handles can be dragged to resize while maintaining the aspect ratio, and side handles can stretch or narrow. Clicking and dragging the X moves the ellipse, and keeping the **Shift** key pressed constrains the move to be horizontal or vertical.

When you click on the X, the sizing handles become rotation handles, which can be used to rotate or skew the ellipse.

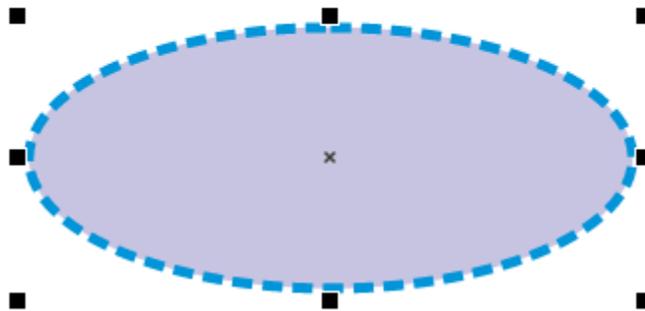
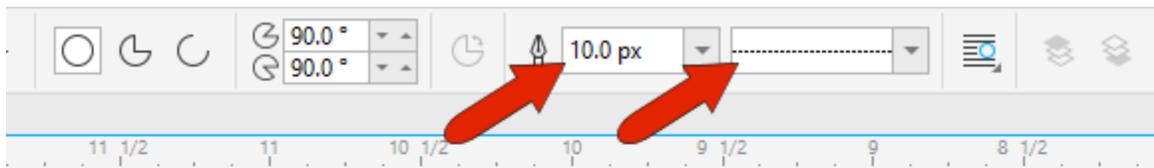


The ellipse center is now a circular pivot point, which you can click and drag to a different spot, and now this point is the center of rotation.

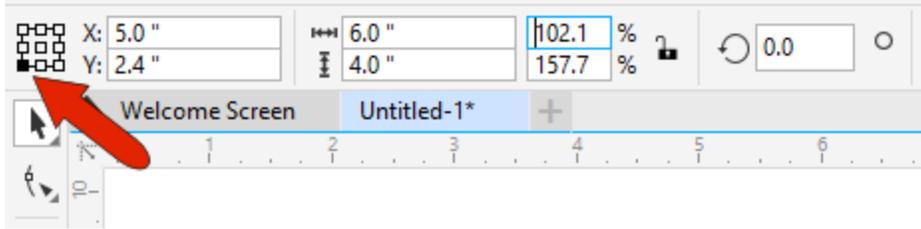


Clicking the pivot point brings back the X and the sizing handles.

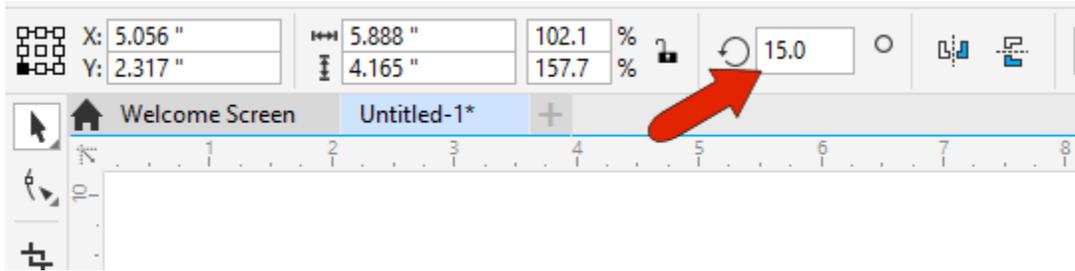
As long as an ellipse's handles are displayed, you can change outline width, line style, left-click a color swatch to add a solid fill, and right-click a color swatch to set the outline color.



You can also use the **Object Position** fields on the property bar to place the ellipse. By default, the X and Y coordinates here define the location of the X at the ellipse center. But you can also choose a different reference point, like the lower left corner of the ellipse bounding box, and specify that point's coordinates. When you use the **Object Size** fields to specify width and height, the reference point remains in place while other points move accordingly. The same applies for the **Scale Factor** fields, which reflect the change from the ellipse's original dimensions. If you change either percentage, the reference point stays in place.



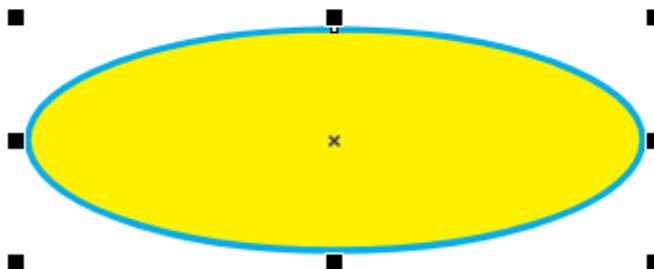
You can also enter a rotation angle.



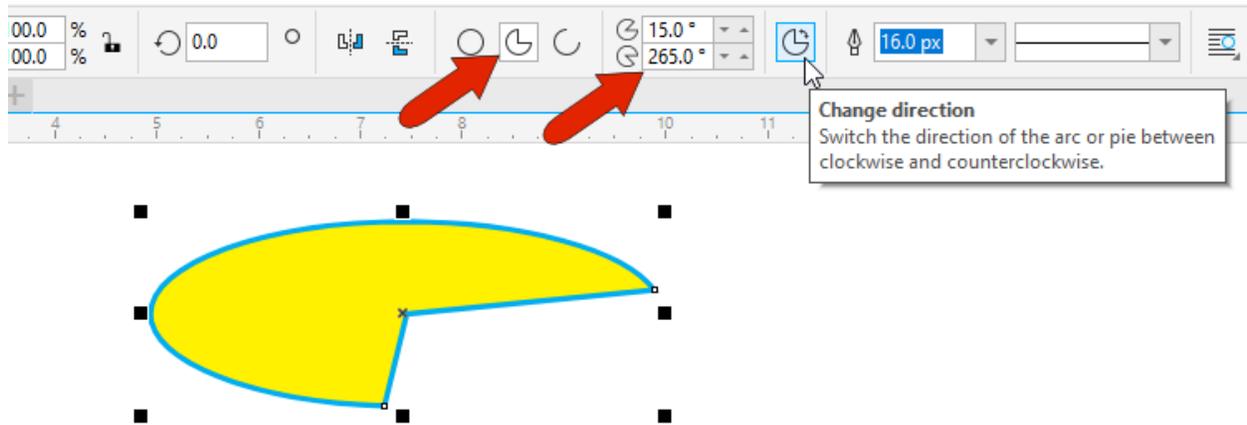
## Modifying an Ellipse

If you want to make changes to an ellipse that isn't selected, you need to first select it. You can select any ellipse while the **Ellipse** tool is active, or you can press the **Spacebar** to temporarily activate the **Pick** tool, which you can use to select the ellipse.

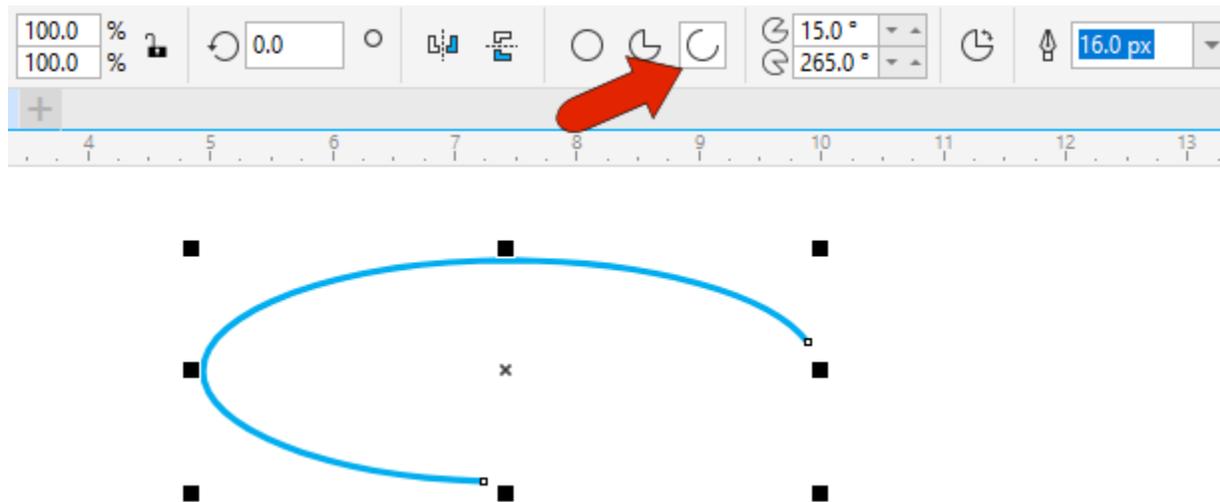
The property bar features three ellipse drawing options, and **Ellipse** is active by default.



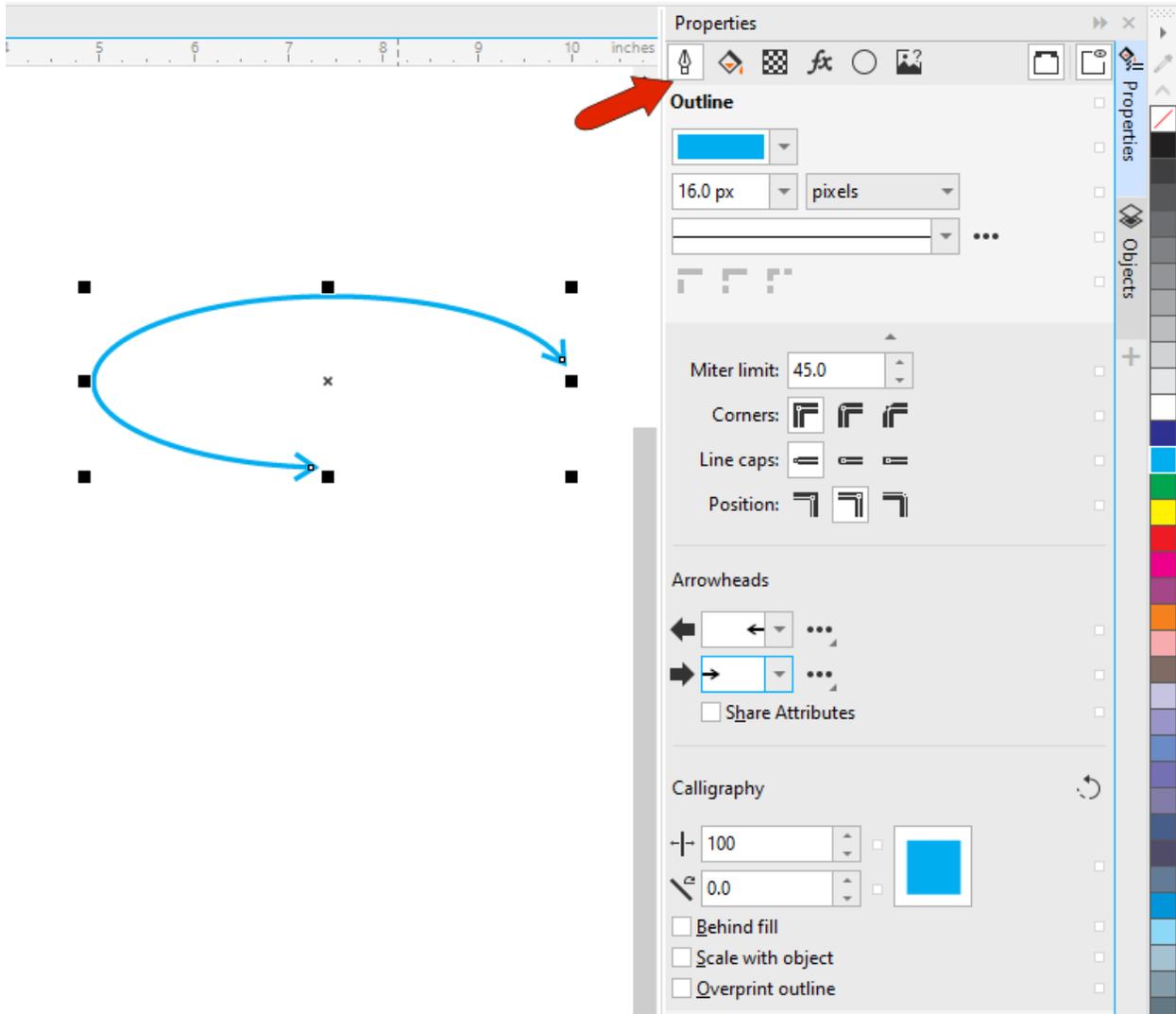
Switching to the **Pie** option produces an ellipse with a pie slice removed, whose start and end angles can be changed. If the part that remains isn't the part you want, click **Change direction**.



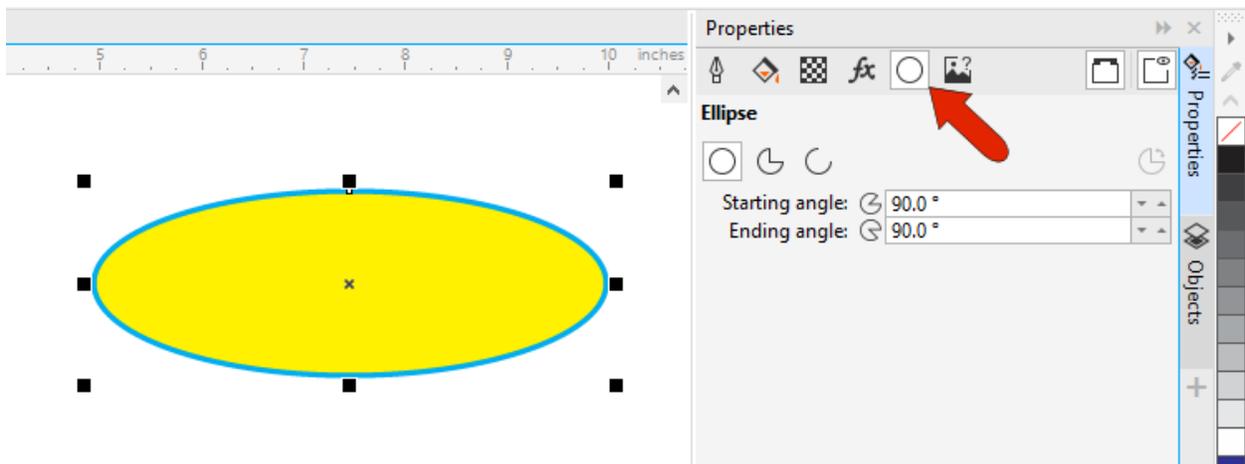
An **Arc** is similar to a pie, but is an open curve with no fill. Setting start and end angles, and changing direction, works the same way as for a **Pie**.



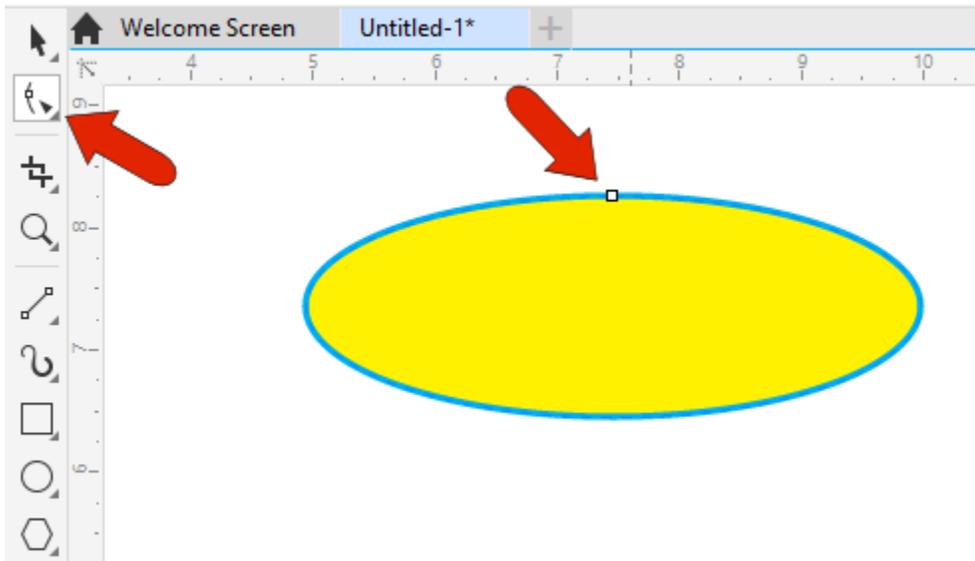
The **Properties** docker (**Properties** inspector for Mac users) can be opened by choosing **Window > Dockers > Properties**. When an ellipse or pie or arc is selected, this docker provides the full set of ellipse options, beyond those on the property bar. For example, on the **Outline** tab, you can add arrowheads to an arc.



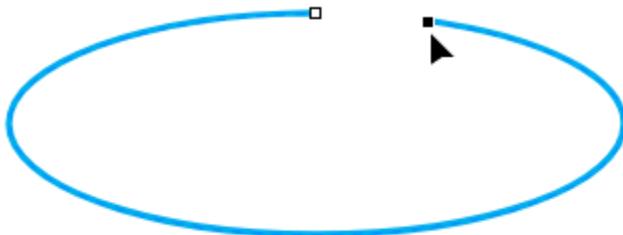
For an ellipse or pie, you can change **Fill** or **Transparency** properties, and the **Ellipse** tab has the pie, arc, and angle options.



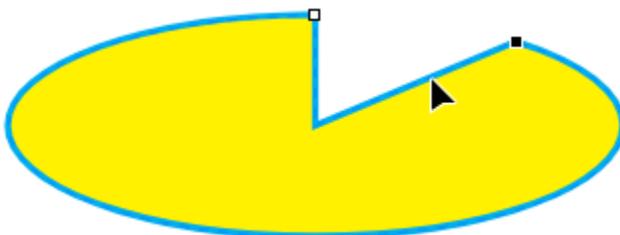
A selected ellipse can also be modified with the **Shape** tool, whose icon is just below the **Pick** tool. For an ellipse, one node appears.



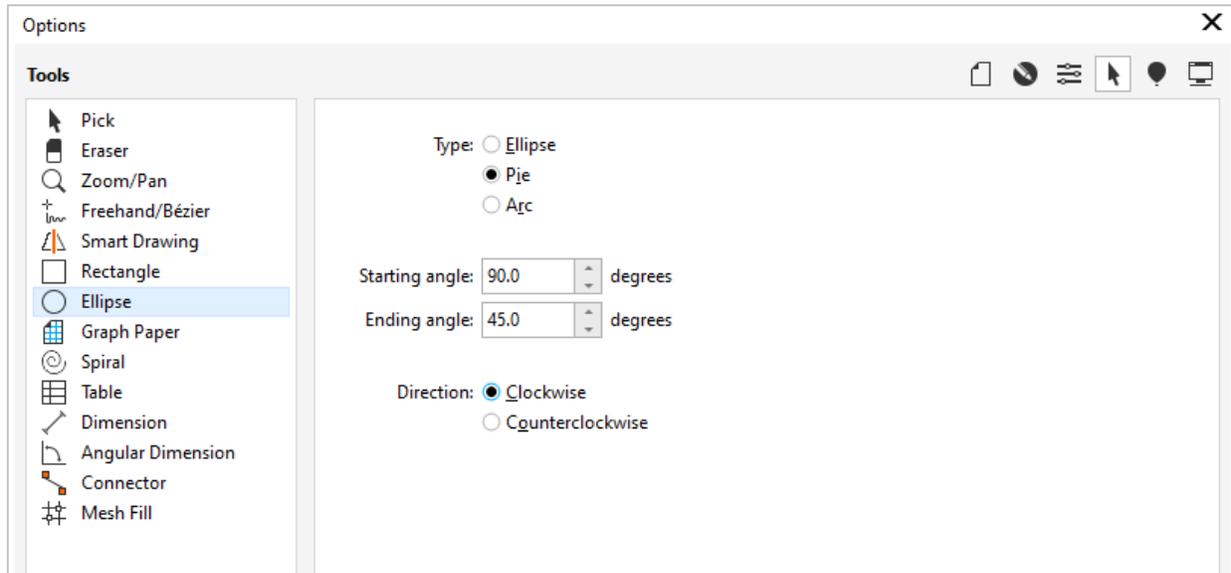
When you click and drag this node, with the cursor **outside** the ellipse, you'll create an arc, and now there are two nodes.



When dragging a node and the cursor is **inside** the ellipse, a pie is the result.



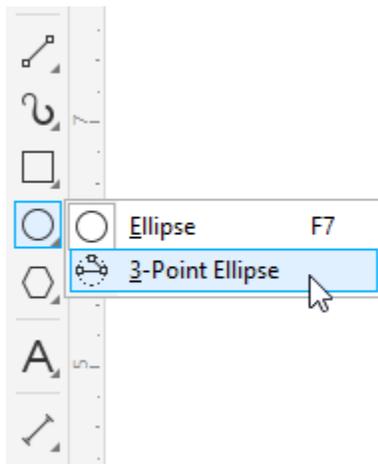
Double-clicking the **Ellipse** icon on the **Toolbox** opens the **Options** window to the **Ellipse** tab. This is where you can set the default start and end angle, and direction, for pies and arcs.



If you change the ellipse angles to zero, and create a new ellipse and activate the **Shape** tool, its node will be at angle zero. If you set new pie start and end angles, and draw a new pie, those new angles will be used.

## The 3-Point Ellipse Tool

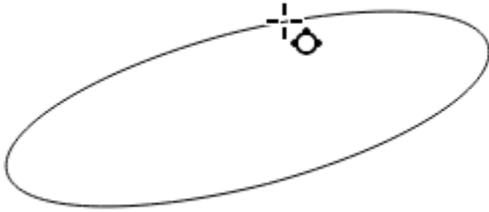
The **3-Point Ellipse** tool can be found in the **Ellipse** tool group flyout.



There are two steps in creating a 3-point ellipse.

- Step 1: click and drag to set the baseline, or ellipse width.
- Keeping the **Shift** key pressed constrains the baseline to specific angles, and without **Shift** pressed you can drag to any second point.

- Step 2: once you have dragged out the baseline, release your mouse button and drag your cursor perpendicular to the baseline to complete the ellipse.



When dragging to draw the rest of the ellipse:

- keeping the **Shift** key pressed will cause the ellipse to be centered around the first point you clicked when setting the baseline.
- Keeping the **Ctrl/Cmd** key pressed will cause the ellipse to be a circle.
- Keeping both **Shift** and **Ctrl/Cmd** pressed will create a circle that is centered around the start point of the baseline.

As with any ellipse, all properties can be changed on the property bar or **Properties** docker/inspector, and pie and arc options are available here as well.