

Using Jasper Circle Guides for Metric Dimensions

USE THE M200, M270, OR M400 CIRCLE GUIDE FOR METRIC DIMENSIONS

(Note: These equations calculate the Pivot hole on the Guide in Inches)

Metric sizes calculated below are approximate, Use the **Actual** equation with the pivot hole value calculated for actual metric diameter

For highest accuracy use a 6.5 MM Bit

To Make a Metric **Cutout** in MM:

$$\text{Pivot Hole on Guide (Inches)} = \frac{\text{Cutout Diameter(MM)} - \text{Bit Diameter(MM)} + 6.35}{25.4}$$

Calculate the **Actual Cutout** diameter using the above pivot hole value:

$$\text{Actual Cutout Diameter (MM)} = \text{Pivot Hole Value (Inches)} \times 25.4 + \text{Bit Diameter (MM)} - 6.35$$

To Make a Metric **Disk** in MM:

$$\text{Pivot Hole on Guide (Inches)} = \frac{\text{Disk Diameter(MM)} + \text{Bit Diameter(MM)} + 6.35}{25.4}$$

Calculate the **Actual Disk** diameter using the above pivot hole value:

$$\text{Actual Disk Diameter (MM)} = \text{Pivot Hole Value (Inches)} \times 25.4 - \text{Bit Diameter (MM)} - 6.35$$

Note: To convert the fractional part to 1/16 inch increments for the circle guide scale, multiply the fractional part times 16. Round up the fractional part of this product to the next 1/16 inch increment.

For example: If you are making a 186 MM cutout with a 6.5 mm Bit the pivothole value in inches is 7.3169. Multiply the fractional part $0.3169 \times 16 = 5.07$. Round 5.07 down to 5 or 5/16. The pivot hole would be $7 \frac{5}{16}$ inches or 7.3125 inches. This would give a cutout diameter of $7.3125 \times 25.4 = 185.7$ MM. If you round the fractional part to the next 1/16 increment, the cutout would be 187.3 MM.

USE THE M300 CIRCLE GUIDE FOR METRIC DIMENSIONS

(Note: These equations calculate the Pivot hole on the Guide in Inches)

For highest accuracy use a 13 MM Bit

To Make a Metric **Cutout** in MM:

$$\text{Pivot Hole on Guide (Inches)} = \frac{\text{Cutout Diameter(MM)} - \text{Bit Diameter(MM)} - 12.7}{25.4}$$

To Make a Metric **Disk** in MM:

$$\text{Pivot Hole on Guide (Inches)} = \frac{\text{Disk Diameter (MM)} + \text{Bit Diameter (MM)} - 12.7}{25.4}$$