

Jewelry Measurement Conversions and Charts

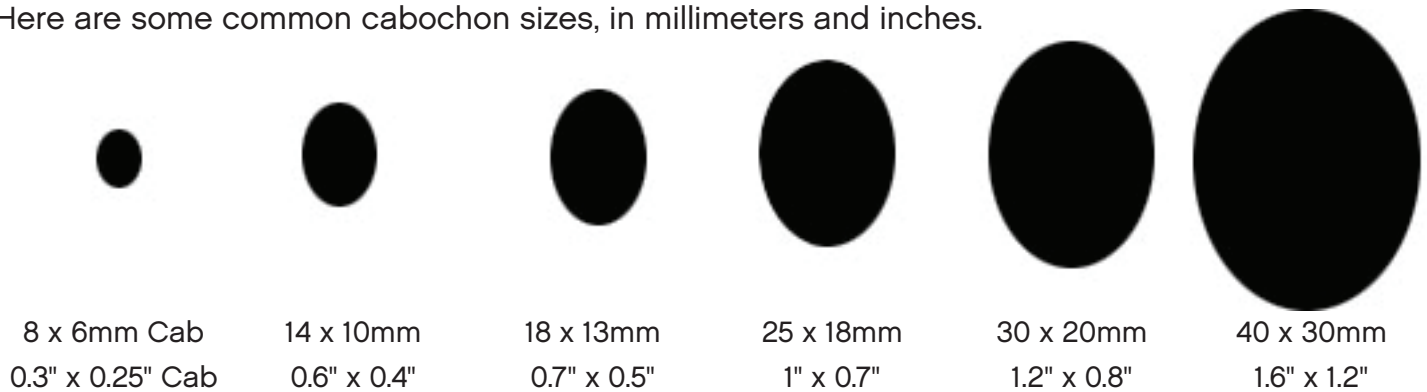
Cabochons and beads are commonly measured in millimeters (mm), while many people in the United States are more familiar with inches (in). Here are some easy ways to figure out what size cabochon or bead to work with!

- * To convert inches to mm, multiply inches by 25.4
- * To convert mm to inches, divide millimeters by 25.4

Cabochons

In most cabochon measurements, the height comes first, then the width (which may seem backwards).

Here are some common cabochon sizes, in millimeters and inches.



Remember, there are 10 millimeters in 1 centimeter, so a 40 x 30mm cab can also be measured as 4 x 3 centimeters. Most rulers in the U.S. have one side for inches, and one side for centimeters.

For comparison, a U.S. Quarter is 24.26mm in diameter (across); a quarter is nearly the same size as a 25mm round cabochon.



U.S. Quarter
(24.26mm)

25mm Round
Cabochon

A U.S. Penny is 19mm in diameter, or 3/4" across. Here's a penny compared to an 18 x 13mm cab:



U.S. Penny (19mm)

18 x 13 Cab

Jewelry Measurement Conversions and Charts *continued*

Beads

Do you want to know the number of beads in a strand? If you know the length of the strand and the size of the beads, you can estimate the number of beads in any strand. Note: this method may not work on beads of different sizes on the same strand.

1. Take the strand measurement and convert it to millimeters.
On Wire-Sculpture, most of our strands are 16" long, or 406.4mm.
2. Divide the strand measurement by the size of the bead.
For example, we have a 6mm round bead.



$$406.4 \div 6 = 67.7$$

There are about 67 beads in a strand of 16" 6mm beads. Each strand may vary slightly by about one bead in either direction.

Wire Gauges

Wire-Sculpture.com's jewelry wire is measured according to AWG standards. Not every wire is available in each shape and gauge; the boxes left blank in the chart below indicate that we do not usually stock that gauge in that shape. All wire begins round, so it is the most common shape.

Here is how each shape is measured:   

Half round wire is measured across the flat part of the wire.

Square	AWG	Inches	Mm	Round	AWG	Inches	Mm	Half Round	AWG	Inches	Mm
				.	28	.0125	.320				
				.	26	.0159	.404				
.	24	.0201	.511	.	24	.0201	.511				
.	22	.0253	.643	.	22	.0253	.643	.	22	.0253	.643
▪	21	.0285	.723	.	21	.0285	.723	.	21	.0285	.723
▪	20	.0320	.813	.	20	.0320	.813	.	20	.0320	.813
▪	18	.0403	1.02	.	18	.0403	1.02	.	18	.0403	1.02
▪	16	.0508	1.29	•	16	.0508	1.29	◡	16	.0508	1.29
■	14	.0641	1.63	•	14	.0641	1.63	◡	14	.0641	1.63
■	12	.0808	2.05	•	12	.0808	2.05	◡	12	.0808	2.05

Jewelry Measurement Conversions and Charts *continued*

Jump Rings

INNER DIAMETER (ID) & OUTER DIAMETER (OD)

Jump rings are typically measured by their Inner Diameter, Outer Diameter, and wire gauge. For example, if you made your own jump rings from 18-gauge wire around a 5mm dowel, the Inner Diameter is 5mm, the gauge is 18-gauge (or 1.02mm, found in the chart above). But what's the outer diameter?



Some patterns call for jump rings measured in OD, some in ID. If you know either the ID or the OD as well as the gauge, you can find your missing measurement.

To find the Inner Diameter (OD):

$$\text{Inner Diameter} = \text{OD} - (\text{wire gauge} * 2)$$

To find the Outer Diameter (OD):

$$\text{Outer Diameter} = \text{ID} + (\text{wire gauge} * 2)$$

So using the example of an 18-gauge jump ring made around a 5mm dowel, remembering that 18-gauge is 1.02 mm:

$$\text{OD} = 5 + (1.02 * 2)$$

$$\text{OD} = 5 + 2.04$$

$$\text{OD} = 7.04\text{mm for an 18-gauge jump ring with a 5mm ID.}$$